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THE COMPUTER COMMUNICATIONS MAGAZINE

October, 1987 $2.50

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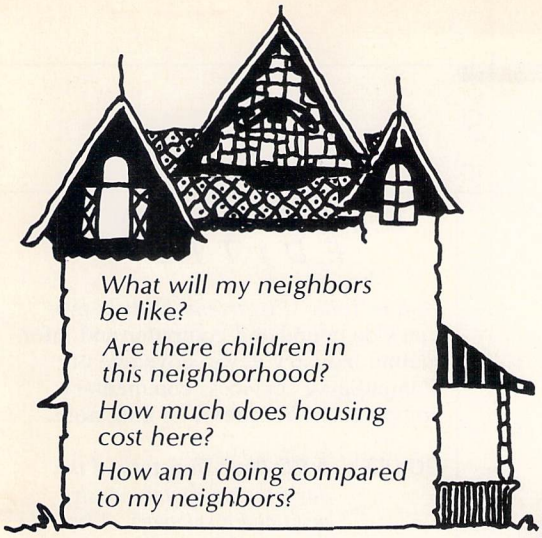
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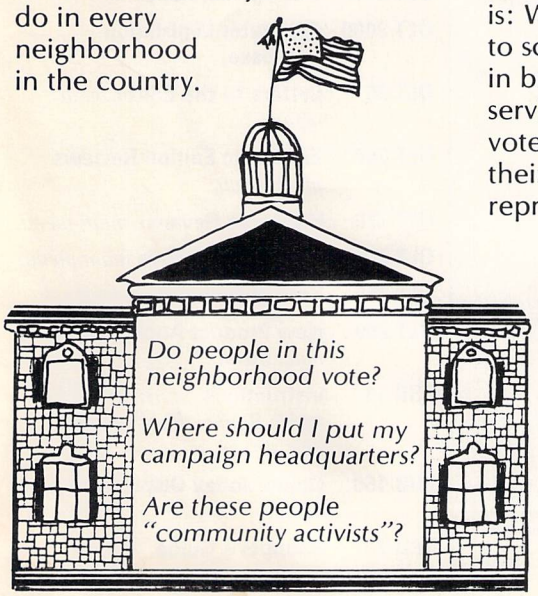

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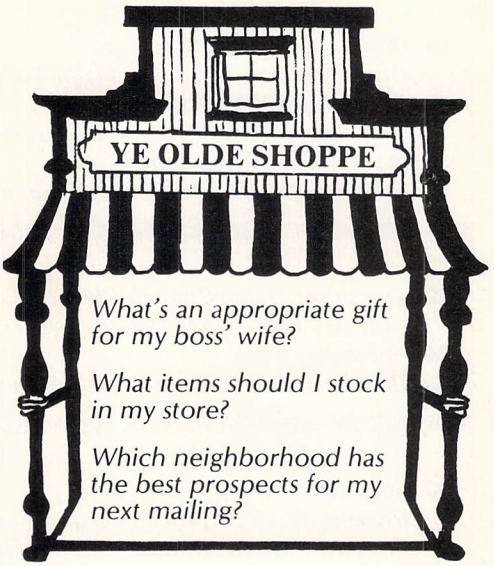
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# DEAR READER

Following the stock market and investing at the right moment.

When Tom Herman, a small business owner from Hawthorne, N.J., started investigating stocks last March, he had no previous investment experience. Instead of consulting a stockbroker, he chose to collect information and make his own decisions. Herman made the rounds from the Investors' Forum to the Quick Quote daily pricing program to the EXAMINE historical pricing database. By downloading data to his financial analysis software program, he was able to compare the performances of several stocks and select the best investment candidates. In April, he invested in two stocks and shortly thereafter sold one at a $650 profit.

In a business where market timing translates into gains and losses, many individual investors are charting a course of financial independence from stockbrokers and other traditional means of gathering information. Several trends, including the proliferation of financial analysis software, the volatility of the market and the popularity of discount brokerage services, have influenced this move toward investor autonomy. Investors who use microcomputers and online financial services can obtain data at their convenience, check the latest pricing information and place "buy" and "sell" orders even on evenings and weekends.

Once an investment is made, the buyer can use online services to keep track of financial and corporate news events that could affect the investment's value. By setting up an electronic clipping folder with keywords for a particular company, it's easy to monitor news items from such wires as Reuters, *The Washington Post*, The Associated Press and OTC NewsAlert.

This month's cover story, "Insights on Investing," beginning on page 20, discusses how to use online technology to follow the market and make investment decisions at the right moment. Related articles provide tips for displaying pricing information and using an online discount brokerage.

* * *

An Executive Option service, the Disclosure II database, will be available to all subscribers as part of a special promotion during October. For more information about this service that offers financial background information on companies, see page 29. Investors will also be interested in the new S&P Online database from Standard & Poor's (see page 30). This service, which replaces the Standard & Poor's General Information File, provides current information on 4,700 companies.

* * *

Also in this issue, find out about a new graphics technology called GIF (Graphics Interchange Format) on page 32. A universal exchange format for high-resolution graphic images, GIF has the capability to store graphic data in a compressed format for quick uploading and downloading. And the clear, colorful photographic displays are nothing short of eye-catching.

Douglas G. Branstetter
*Editor*


**ONLINE TODAY**

***Online Today*®, October 1987**
Volume 6 Number 10

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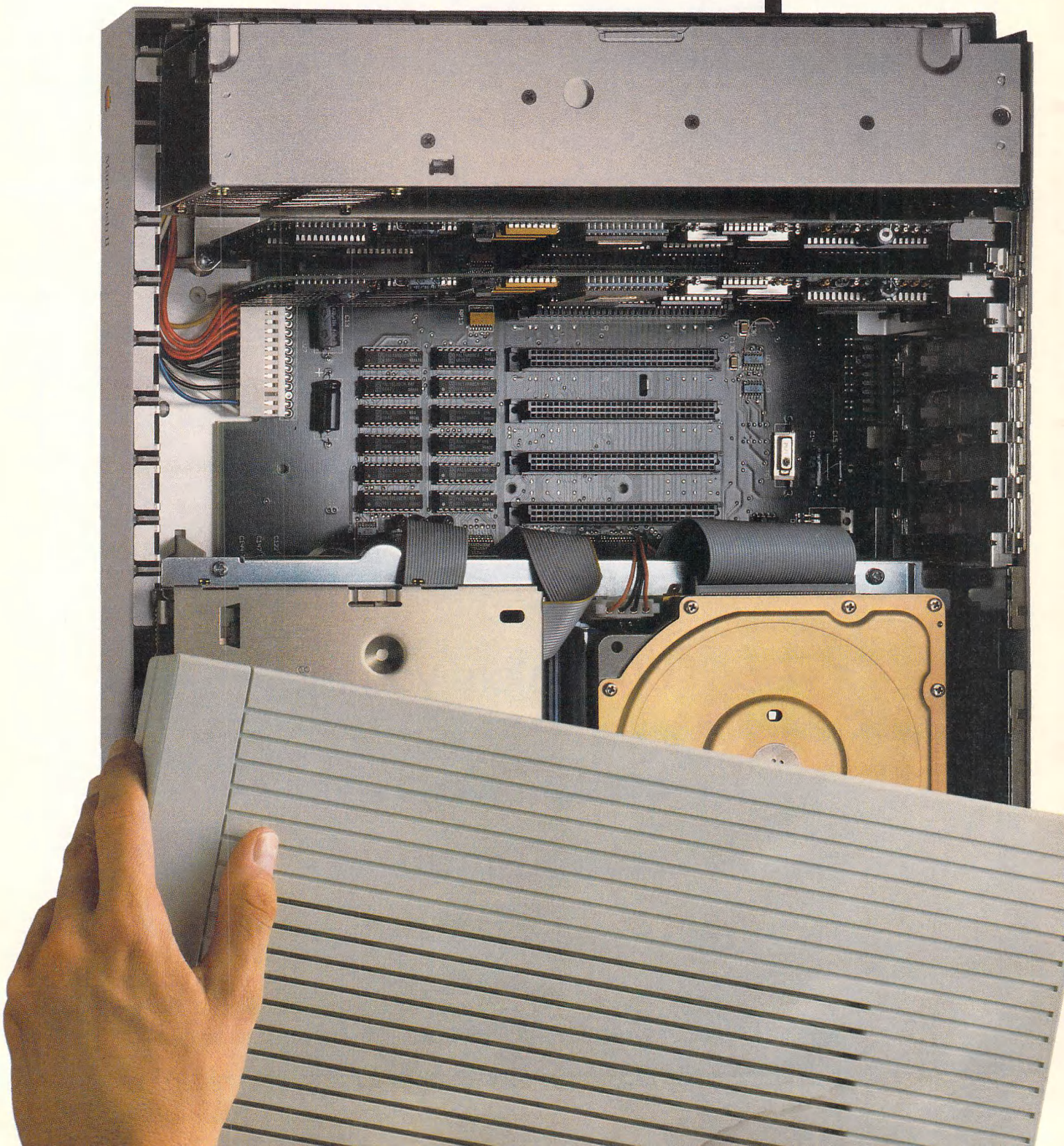

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Macintosh™ personal computers are having a positively uplifting effect on business.

A fact not lost upon a growing number of FORTUNE 500 companies, as they watch productivity go up. And training costs come down.

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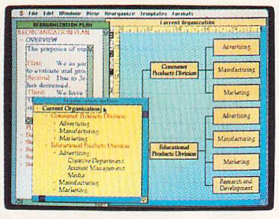
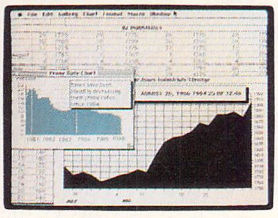
But to add fuel to the Macintosh fire, we now present our most powerful computer yet: Macintosh II.

Which, because of its talent for easy expansion, is raising even more corporate eyebrows.





*Next-generation software is already here. Macintosh II runs programs like Living Videotext's MORE and Microsoft's Excel.*

Just take off its cover and you can easily appreciate why. Inside are six expansion slots that represent an entirely new kind of technology.

They handle information with extraordinary speed. Plus, they have the good manners to "configure" themselves.

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As for the available options, they're rather revolutionary as well.

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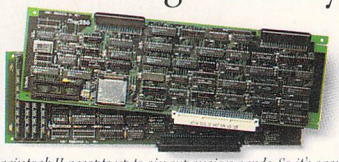

*Macintosh II accepts up to six expansion cards. So it's easy to add new power, like the ability to run MS-DOS software.*

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# LETTERS

### Growing Up Online

The photo on the August cover is intended to show the many activities of your readers. However, there are several problems with the picture.

The motorcycle that the young people are riding is a large displacement sport model—capable of speeds in excess of 130 mph. Yet, they aren't wearing helmets or protective clothing.

As a motorcycle rider, I understand the value of proper protection, and I never get on my bike without a helmet. I realize that many states do not require motorcyclists to wear helmets, and I often see motorcycle riders dressed as those on your cover. Still, as a magazine, you have a responsibility to your readers to show the safe, responsible performance of any activity.

Michael W. Henderson
Albuquerque, N.M.

The cover of your August issue portraying young people enjoying summertime activities has a disturbing element. The two young people riding the 750 cc motorcycle are not wearing helmets and protective clothing. Also, why isn't the load secured to the motorcycle so that the riders may properly balance?

The youths in the jeep are not seated in a safe manner, and the one behind the wheel is wearing headphones, in violation of the vehicle laws in many states.

It's obvious that the scene is designed to show various hobbies and activities discussed online, but at what cost? If we offer examples for young people to emulate, it's important that the examples be proper.

Ed Greenberg
San Rafael, Calif.

### Soviet and American Youth

In his letter (July issue, p. 7) Roy Smart threw in several cliches of his own in referring to an earlier article, "Soviet and American Youth Discuss Space" (February issue, p. 17). The cliches are especially evident when he attempts to attribute sinister motivations to the 10 Soviet visitors.

I sincerely hope that *Online Today* readers realize that Americans on official visits to the Soviet Union also foster their government. Also, American leaders "are driven by the idealogy that anything that promotes capitalism is good and anything that doesn't is bad."

John Grant
Press Officer
American Communist Party
Baltimore, Md.

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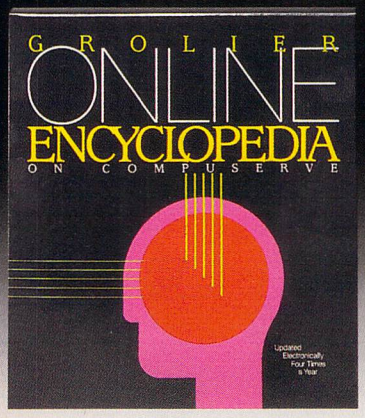


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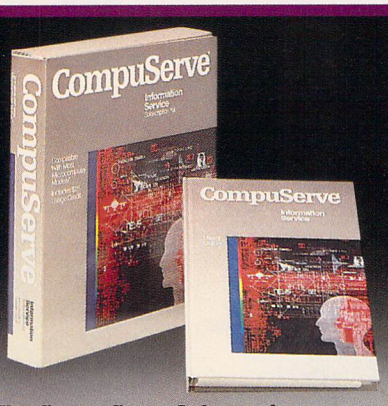


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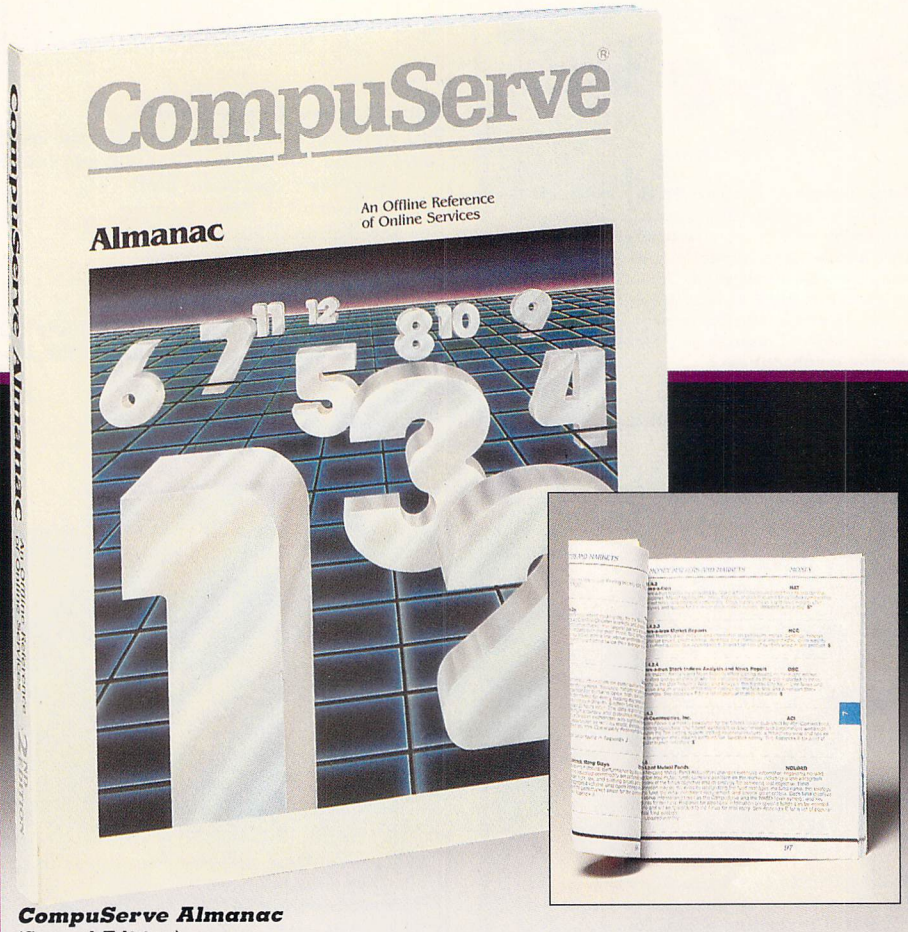


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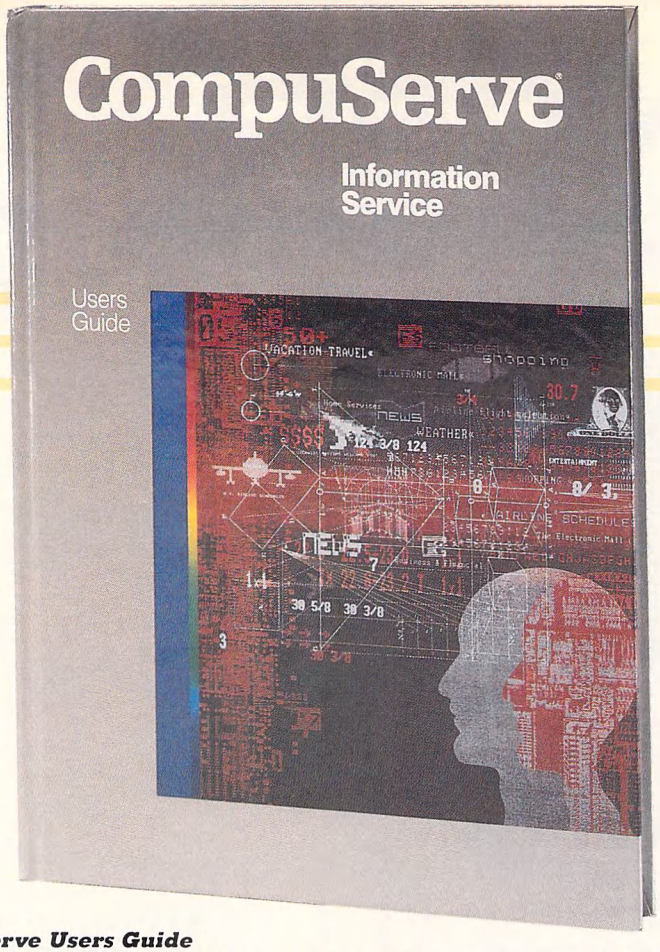

**Back Issues of *Online Today* Magazine**
*Online Today* magazine's back issues represent an archive of incisive articles tracking the evolution and impact of videotex and computer communication. Use a list of feature articles from back issues, provided online, to obtain volumes missing from your set, or to select issues of interest published before you became a subscriber.

Reg. $2.50 **Save $1.00** **$1.50**

***CompuServe Users Guide***
This spiral-bound, hardcover 200-page guide, is highly recommended for subscribers who've come online through the CompuServe IntroPak program. The guide covers:

- EasyPlex® electronic mail
- the Executive News Service
- the National Bulletin Board
- Citizen's Band Simulator
- Forum message boards, data libraries and conferencing
- information transfers to and from your computer
- travel services
- financial services
- electronic shopping
- interactive games and more

A System Configuration Diagram, an alphabetized Quick Reference Word index and more than a dozen Reference Cards come with the *Users Guide* for further assistance.

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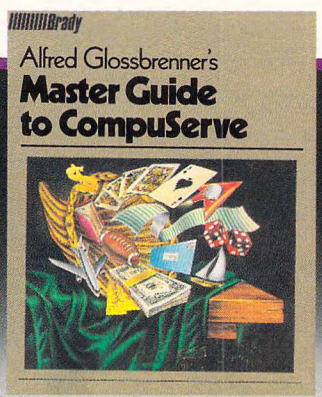


***Master Guide to CompuServe***
From Alfred Glossbrenner, the author of several online computing books, comes the *Master Guide to CompuServe*. This book is written for novice and advanced CompuServe users alike. According to the author, it not only tells you how to use the service, but gives you all the necessary tools to keep up with the constant expansion of the offerings on CompuServe. It's an invaluable resource for CompuServe users of all levels.

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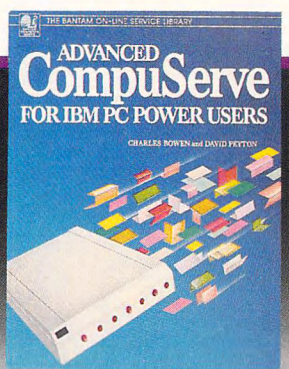


***Advanced CompuServe for IBM Power Users***
This newly published (4/87) book, by Charles Bowen and David Peyton, is written for the accomplished CompuServe user with an IBM PC or compatible. It deals with some of the finer points of CompuServe such as uploading and downloading non-commercial software to and from IBM-related Forums, archived and libraried files, communications programs and several other more advanced topics. A must for any IBM power user's library.

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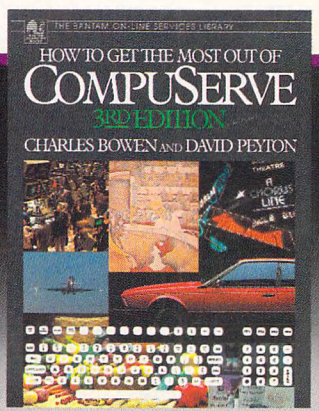


***How To Get the Most Out Of CompuServe*** (Third Edition)
An earlier editions of this Bantam book, by Charles Bowen and David Peyton, earned acclaim from accomplished CompuServe users, novices and even non-subscribers for its step-by-step discussion of CompuServe's leading products. Included in the book is a $6 usage credit!

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**VIDTEX Terminal Communications Software**
No one links you to CompuServe like CompuServe. Whether you have an Apple®, Atari® or Commodore®, you'll get the best link-up with genuine CompuServe communications software. (Complete information about VIDTEX compatibility requirements is available online: GO VIDTEX) Only CompuServe gives you all of these features in a complete communications software package that includes:

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- navigation files
- programmable function keys
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- adjustable communication settings
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**Professional Connection 3**
This powerful, all new software package for the IBM PC, PC-XT, PC-AT and most compatibles, illustrates colorful financial charts, pictures and weather maps with NAPLPS and RLE graphics. It also dials the phone, completes your connection and takes you wherever you want to go online—with a few simple key strokes. PC3 also includes all of the following and more:

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- terminal settings directory
- custom menus
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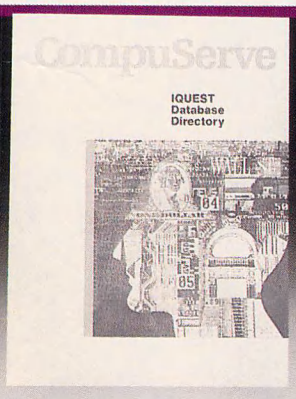
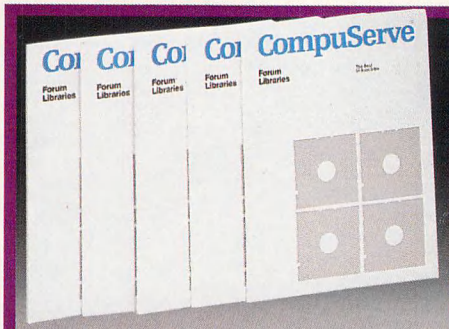
**NOTE:** If you have purchased Professional Connection 2 between April 1, 1987 and October 1, 1987, you can go online and order a complete PC3 package for free (plus $2.50 shipping and handling). If you purchased PC2 any time prior to April, you can get the all new Professional Connection 3 for the modest price of $19.95 (plus $2.50 shipping and handling).




***IQuest Database Directory***
Use IQuest more efficiently and effectively with this guide published by CompuServe. It provides a description of each database and is broken down by subject for easy reference. Anyone who uses IQuest will find this a valuable tool to speed research and use connect time more efficiently.

**$3.95**




**Forum Data Library Directories**
These forum software guides present indexed descriptions of top offerings from leading personal computing forums. The *Best of Amiga, Tandy Model 100, Atari 8-Bit, Macintosh User Forums* and *IBMNET*, already in its second edition, catalog hundreds of powerful utility programs and standalone applications available for public access on CompuServe. They pay for themselves in connect time savings. Available while supplies last.

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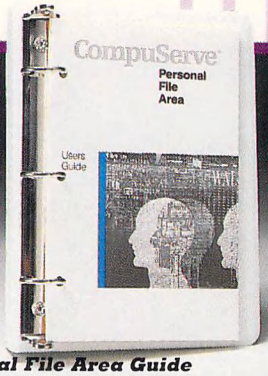


***Personal File Area Guide***
All subscribers receive 128K of storage in a personal file area. EasyPlex messages, Executive News Service clippings, files, "form" letters and more can be stored for 30 days without charge. File management programs, text editors, disk storage techniques, EasyPlex shortcuts and other topics are explained in this guide. Just what you need to use the storage area to its utmost potential. Includes: ICS, Terminal Parameter and EDIT Reference Cards. (Binders not included)

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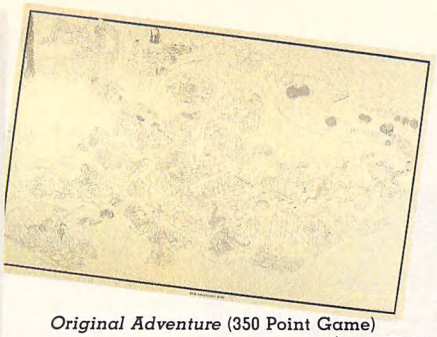

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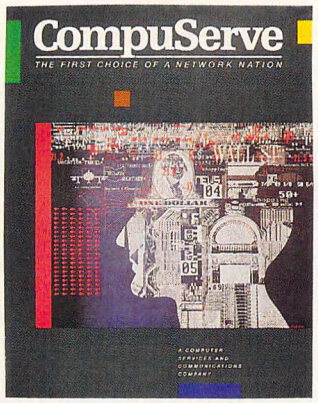


**CompuServe: First Choice of a Network Nation Poster**
World-renowned illustrator, Fred Otnes, produced the commissioned illustration that is the focal point for this full color, 23" x 30" poster. A perfect addition to a home computer alcove, den or office wall.

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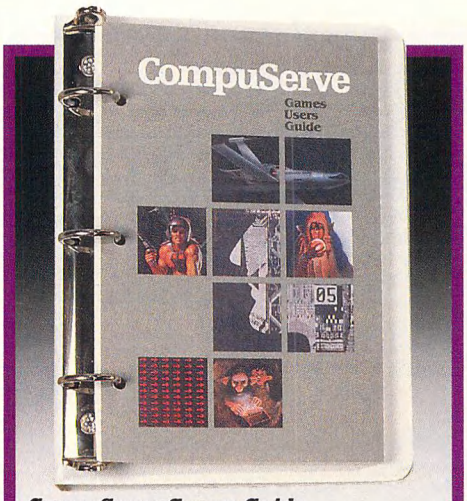


***CompuServe Games Guide***
This manual of the CompuServe game universe offers descriptions of most game offerings, rules, playing suggestions and a section on getting the most out of the Gamers' Forum. Guide comes in a sturdy vinyl binder.
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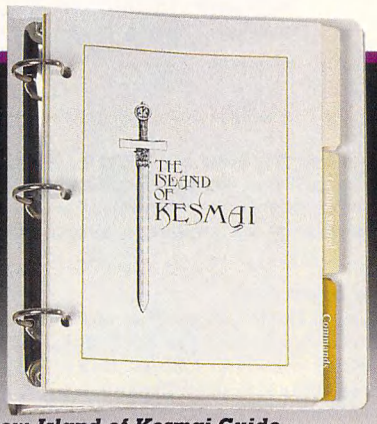


***New Island of Kesmai Guide***
One of CompuServe's leading adventure games, *Island of Kesmai*, is like no other online island you've ever visited. Prepare yourself with this comprehensive island atlas. Meet the inhabitants, learn their customs and social mores. You won't just bring the game's interactive features to greater light, you'll lead a longer life in your island role. Guide comes in a sturdy vinyl binder.
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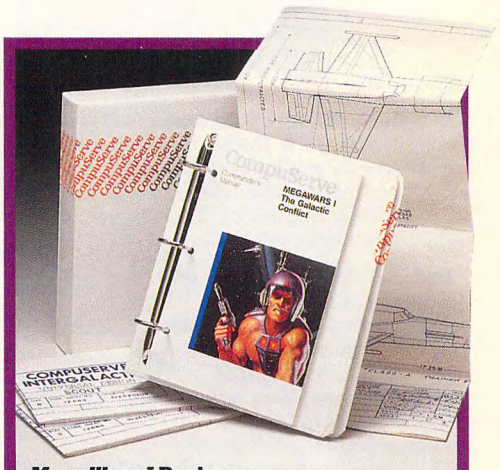


***MegaWars I* Package**
Real-life accessories for the fantasy gamer. This package includes a *MegaWars Briefing Guide* in a three-ring binder, along with a series of five *MegaWars* spacecraft blueprints and a galaxy map to enhance your *MegaWars I* play.
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**CompuServe Logo T-shirt**
Announce your role as one of the leaders. Display your online allegiance to the nation's leading information service with this cotton/poly T-shirt silk-screened with the CompuServe logo. Choose from light blue, navy blue or red. Some children's sizes available.
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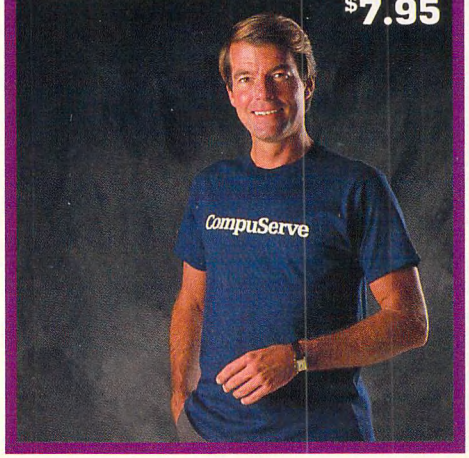


***Island of Kesmai* T-Shirt**
Make sure you look your best for your next visit to the island. An *Island of Kesmai* T-shirt is the ideal attire for encounters with island inhabitants of all sorts.
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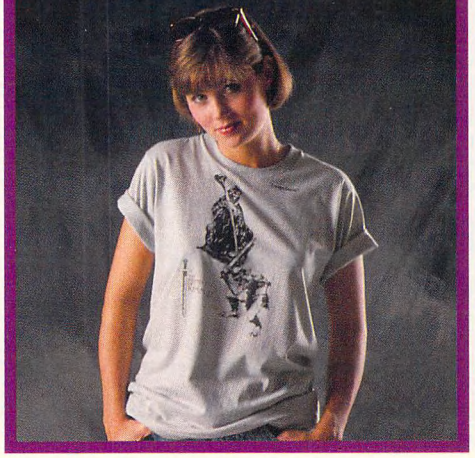

***BlackDragon* T-Shirt**
Cross the Labyrinth, slay the dragon and live? Announce your gaming success by sporting this black T-shirt with white *BlackDragon* illustration.
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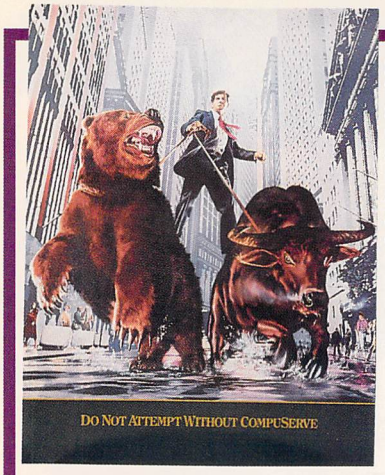


**Bull and Bear Poster**
This very popular and highly-requested poster supporting the CompuServe financial products is making its debut in Fingershopping. Original art, as seen in CompuServe financial ads. A welcome addition to any office or den.

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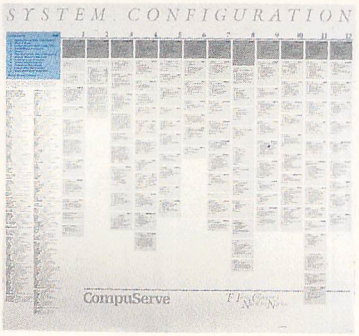


**CompuServe Information Service System Configuration Wall Chart**
This 35" x 33" poster (7/87 version) depicts all screens appearing on the Top Menu and all screens accessible from those initial choices. Extremely helpful for navigating around the service.

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**CompuServe Digital Desk Clock**
Mounted within a clear lucite desk stand for high visibility, this contemporary timepiece is an attractive and useful addition to any computer workstation—home or office. It prominently displays the CompuServe logo and comes with a perpetual calendar in an adjacent window.

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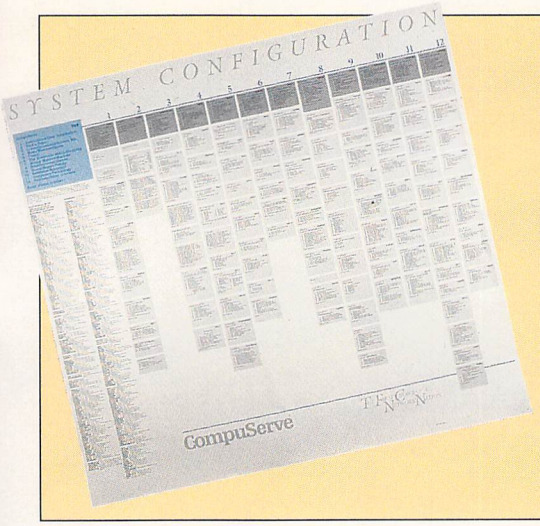


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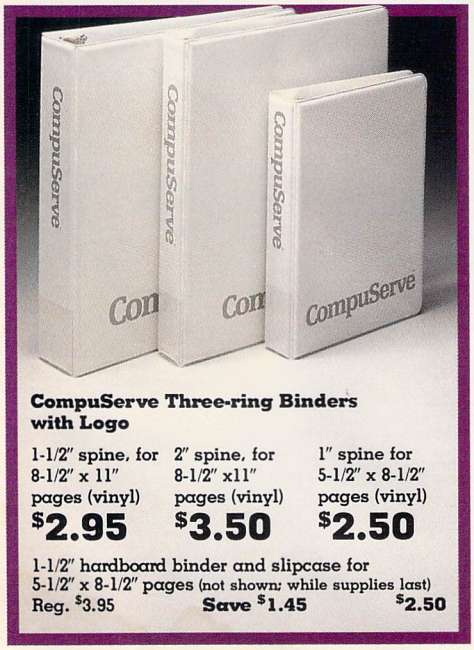
**CompuServe Information Service Systems Configuration Wall Chart**
As a special incentive to place an online order during the Fingershopping Sale, any order over $25, placed between October 1 and November 30, will receive a revised (7/87 version) CompuServe Information Service System Configuration Wall Chart FREE. The chart will be included automatically in qualifying orders, there is no need to enter an order for your bonus item. Detailed descriptions and prices for all products available for Fingershopping can be found online. Enter GO ORDER at any prompt.

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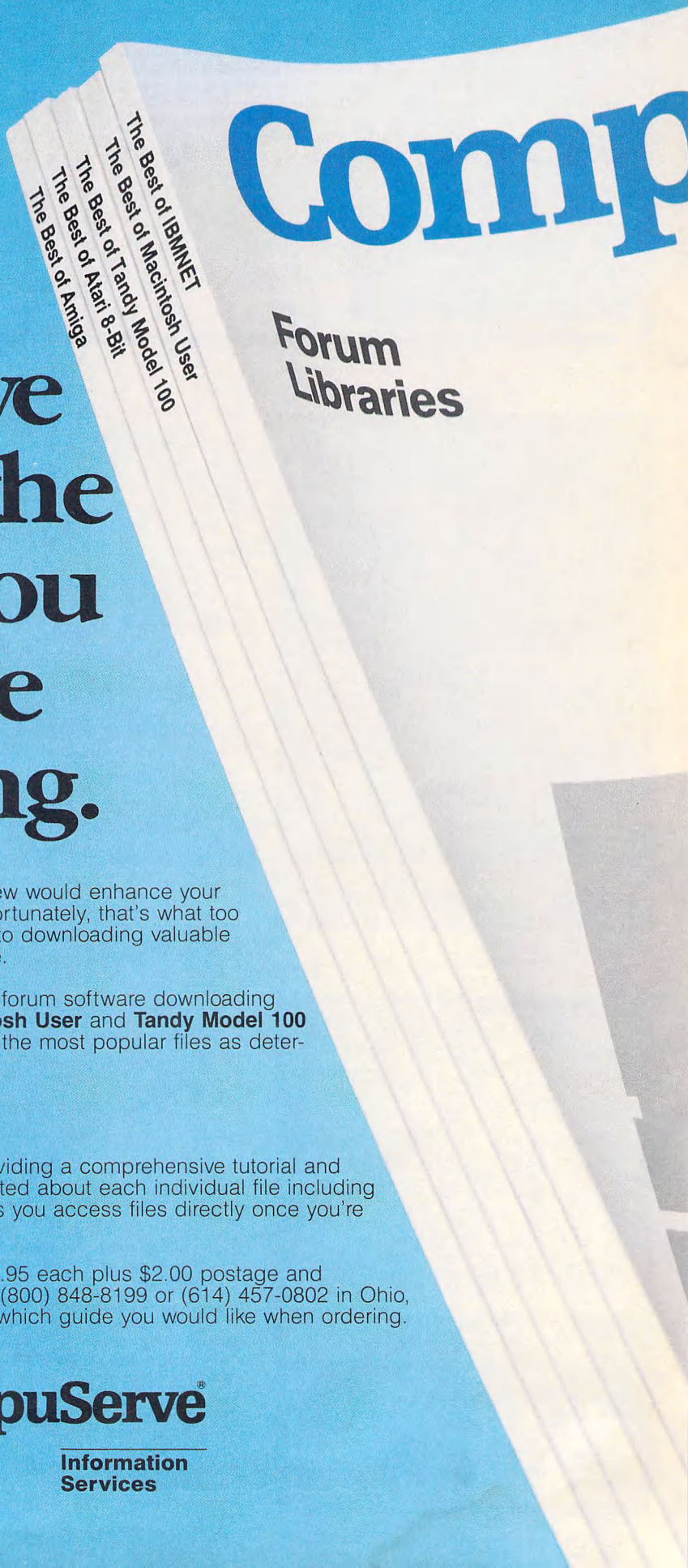


Would you completely ignore something that you knew would enhance your personal computer's capabilities? Probably not. Unfortunately, that's what too many personal computer owners do when it comes to downloading valuable program files from the data libraries on CompuServe.

To remedy this problem CompuServe has published forum software downloading guides for the **Amiga, Atari 8-Bit, IBMNET, Macintosh User** and **Tandy Model 100 Forums**. These *Best of ...* guides are a collection of the most popular files as determined by the members of each of these five forums.

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## Editing with Ease

Now, a Minneapolis software publisher has come up with what it claims is the first word processor you can use both online and offline. TeleWriter II, $129, runs on IBM PCs and compatibles and includes such useful features as split-screen operation, global search and replace, column math, names and address sorting, microjustification and background printing. Also included are script command files for sending completed files to CompuServe and other popular information services.

More details are available from R&S Micro Services, 2500 39th Ave. NE, Minneapolis, MN 55421; 800/328-6400.

## Newsletter Presents Women Computing

*Women Computing*, a small well-produced newsletter, is trying to help women become less technophobic.

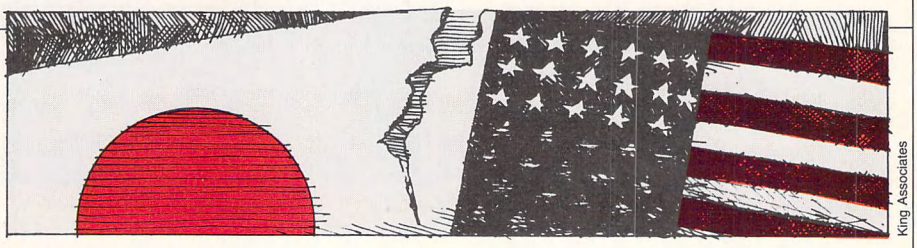
Publisher Diane Schaffhauser admits that men have more readily accepted the computer as a needed business tool. "When women have questions, they usually ask men for help. Women rely on men to gain an understanding of computers," she says.

Although they may be a bit fearful of the new technology, women are using computers in the workplace. Still, the majority of working women who use computers are clerks, typists and secretaries, and so fall on the low end of the computing pay scale. Of the more technical and higher paying positions, only 28 percent of computer specialists are women.

General computer publications that survey subscribers usually reveal that as many as 85 to 90 percent of their readers are men. *Women Computing* aims to be different. Schaffhauser says the purpose of her new publication, which debuted in the spring, is to put computer learning in the hands of women. She says that *Women Computing* is different because it has a bias: "women must learn about computers to remain viable in the workplace."

The monthly newsletter features articles on health, money, education, resources and job opportunities plus reviews and computer tips from women. For information, contact *Women Computing*, 2917 Upas St., San Diego, CA 92104; 619/297-7094.

*— Cathryn Conroy*



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## Trade Tensions May Escalate

Trade tensions between the United States and Japan are likely to get worse before they get better. That was the consensus of experts assembled at a conference on Japanese/US relations held in Los Angeles recently.

Speaking before an audience assembled for the Japan Week L.A. conference, William Watts, president of the Washington, D.C.-based Potomac Associates, a firm specializing in analyzing relations between the two countries, noted that past squabbles between the two nations have focused on specific sectors of the economy, such as steel, autos and electronics. New issues are going beyond the sectoral borders and into national welfare and security.

"People are beginning to ask questions such as 'Whose oil is the United States protecting in the Persian Gulf?', and 'How much responsibility for the protection should those other countries take?'," Watts said.

Three other speakers on the forum panel also addressed the outlook for US-Japan relations. The speakers were Jiro Tokuyama, senior advisor to the newly-formed Mitsui Research Institute in Tokyo and to Nomura Securities Co., Glen S. Fukushima, director for Japanese affairs at the US Trade Representative's office in Washington, and Taizo Watanabe, Consul General of Japan in Los Angeles.

Fukushima, who has been involved in most trade negotiations between the two countries for the past two years, was philosophical. On the one hand, he said, Japan needs more experience at "internationalizing," while this country needs a more global philosophy.

Perceptions that each country holds toward the other and toward their international roles, will set the pace for future relations, Fukushima said. But the ideal outlook for the countries will be to learn to coexist, and then to set that example for other nations to follow. That is not only a future opportunity, but it also carries with it the responsibility of solving our trade problems, he added.

Tokuyama, a noted international economist, said conventional macroeconomic principles are now and increasingly will be inadequate in meeting future bilateral and global issues. International borders are disappearing into the multinational natures of societies and their own economic engines.

Watanabe, a career diplomat who has been posted a total of five years in the Japanese Embassy in Washington, said the current bilateral trade imbalance and any perceptions of "unbridgeable" economic, social and political gaps between our nations can and will be resolved as both nations concentrate on putting their houses in order.

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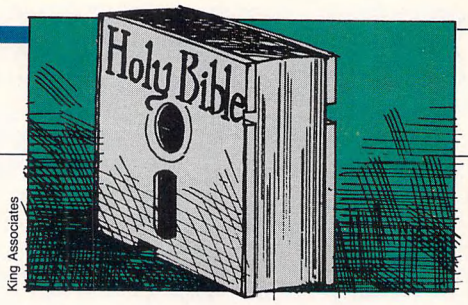


"Ask God" is an artificial intelligence software program for the IBM PC and compatibles that offers access to the King James version of the Bible.

Developed by Integrated Systems & Information in conjunction with Thunderston/EPI, Ask God searches files or books of the Bible individually or in groups to answer questions. The sections of text retrieved are displayed so you can accept or reject the program's answer. As answers are approved, the software "learns" the focus of your question to continue the search. Any Biblical text you accept, and your questions, comments and commands, are automatically written to an output file for further study and access by an ASCII-text word processor.

The developers of the program say that Ask God is unusual because you can carry on a conversation with the program by commenting on the answers retrieved to direct its output to relate more closely to your questions.

Ask God is sold in a series of modules. Module 1, which includes Matthew, Mark, Luke, John and Acts, is available for $49.95 from retail computer, software and Christian bookstores. Additional modules sell for $8 directly from the manufacturer.

For information, contact Integrated Systems & Information, 10316 N.E. 113th Pl., Kirkland, WA 98033; 206/827-3705.

*— Cathryn Conroy*

## X-ray Technology to Shrink the Chip

IBM and the Oxford Instruments Group of Oxford, England, are collaborating on the design and manufacture of a prototype electron storage ring that IBM will use to explore the potential of X-ray lithography in the fabrication of future generations of semiconductor devices.

The compact electron storage ring, measuring only 6 feet by 15 feet, will beam X-rays onto the surface of silicon wafers to produce computer logic and memory circuits with smaller dimensions than are attainable today with other methods. It is the first such installation at a US semiconductor manufacturer.

During the past seven years, IBM scientists have conducted research in X-ray lithography, using facilities at the Brookhaven National Laboratory in Brookhaven, N.Y. These research activities have now been relocated to East Fishkill, N.Y.

For further details, contact John I. Willmott at IBM's East Fishkill facility; 914/894-8989.

*— John Edwards*

## Portable Computers on the Move

The Market Intelligence Research Co. has looked at the portable computer market and likes what it sees.

According to the Palo Alto, Calif.-based research firm, the total market for portable computers will reach about $2 billion in 1993, a gain of 20 percent portables are anticipated to drop to one-half of their present level by 1990 and to one-third by 1993.

The company notes that laptop portables are likely to see the most market action, with sales accounting for 80 percent of the portable computer market by 1990. Smaller notebook-sized machines will continue to be valued by certain users, it claims. But these machines will have increasing price pressure from laptops, which are expected to drop to the $500 to $700 range for low-end models. Transportable computers will leave the scene as quickly as they came, claims MIRC.

A major portion of the laptops sold will go to identifiable vertical markets, says the company. Use in sales auto-one-fourth of all laptops sold in the near term. Other vertical market segments that will account for substantial sales of portable computers include accounting and auditing, education, engineering, manufacturing, insurance, law enforcement and real estate.

More details are available from the Market Intelligence Research Co., 4000 Middlefield Rd., Palo Alto, CA 94303; 415/856-8200.

## Computer Yields Cream of the Crop

The next time you're in Moscow (Idaho, that is), be sure to stop by the University of Idaho's Dairy Science Center. There, you will see one of the world's first computerized milking parlors.

The parlor, which cost $150,000, features a milker that automatically takes samples from each cow. The unit records such vital factors as milk weight, rate of flow and medications that could affect the milking process. The computer automatically removes the milking mechanism to prevent overmilking and flushes it to be ready for the next cow. Best of all, eight animals can be hooked into the contraption at one time.

As Ross Christian, head of the University's Department of Animal Science, puts it: "Right now we're at the top of the heap." Indeed.

## Credit Card Phones Appear on Deck

The ubiquitous pay telephone has hit the high seas.

With credit card phones now common fixtures in hotel lobbies, airports and even airplanes, the next logical step is to place such units on cruise ships, says Robert Eichberg, vice president of Comsat Maritime Services. According to Eichberg, high-quality satellite communications provide seagoing callers with a reception quality that is comparable to land-based and mobile-cellular communications. In the past, conventional ship-to-shore radio links typically offered callers unreliable, noisy connections that were more suited to a World War II troop carrier than a modern cruise ship.

As a test, Comsat last year placed credit card pay phones on three cruise vessels. The project was so successful, says Eichberg, that 100 credit card phones were pressed into service this yearpirst companies to take advantage of the new service.

Eichberg notes that the phones "operate much in the same way as land-based pay phones, with the calls billed directly to the credit card holder." The phones are available to passengers 24 hours-a-day and operate independently of the ship's radio room hours.

For further details, contact your local cruise operator or travel agent.

# Keep your mainframe in touch: Send your remote PCs a card!

If a telephone line goes to wherever your remote PCs are, Sync-Up™ from UDS can now link them directly to your mainframe!

Sync-Up fits a complete synchronous modem and a protocol converter onto a single card; no other modules are required. Add appropriate UDS-supplied software, and you'll have a fast, reliable micro-to-mainframe link. If your system is already supporting 201C, 212A, 208A/B and/or 9600B modems, no modifications are required at the mainframe end.

Sync-Up boards may be specified with software to support 2780/3780 or 3270 BSC, and 3270, 3770 or 5251 SNA or a variety of other protocols. For complete technical data and quantity prices, contact Universal Data Systems, 5000 Bradford Dr., Huntsville, AL 35805. Telephone 205/721-8000; Telex 752602 UDS HTV.

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# How to Find Other Subscribers

As a newcomer to CompuServe, probably one of the first things you learned was that you are not alone on the system. The number of CompuServe Information Service subscribers is now in the hundreds of thousands and is growing daily.

Maybe one of the reasons you subscribed to CompuServe was the interaction the service allows among subscribers. In fact, there is no other system in the world that offers so many ways for computer users to communicate: electronic mail, forum message boards and real-time conversation in the forum conference areas and in the CB Simulator.

So, how do you meet subscribers with interests similar to your own? And how do you communicate your interests?

Within the last year, major revisions have been made in two important CompuServe directory database systems to provide users with efficient ways of communicating.

The most recent revision has been in the Subscriber Directory. The new system moves quickly to locate User ID numbers of most subscribers on the system, so you can use it to address EasyPlex mail. The directory contains the first and last names, city, state and User ID numbers of CompuServe subscribers who wish to be included in it.

To access the directory, type GO DIRECTORY at any system prompt. The first choice on the menu is an overview of the directory. Choosing Option 2 on the menu allows you to begin a search. And Option 3 allows you to include or exclude the User ID number you are using.

The directory is searchable by name only. This could be a problem if it weren't for the fact that the search can be narrowed to a state and even a city when the search for a particular name becomes too large.

If you were searching for me in the Subscriber Directory, you would choose Option 2 from the menu. Then you would be asked to enter a last name following a colon prompt.

Since there are few Peytons on the system, you could type PEYTON at the "Last name" prompt to display all of the Peytons registered as users on CompuServe.

However, let's say you were searching for someone named Robert Jones who lives in California. The total number of subscribers named Jones is considerable, to say the least. Thus, when you type JONES at the "Last name" prompt, the system will ask you to narrow the search by asking for a first name, or the first few letters of the first name. You could type ROB, but you might get some Roberta Joneses mixed in with the Roberts. So, if you know the entire first name, it is best to use it.

The system then will require further information since there are too many subscribers named Robert Jones to list

conveniently in one screen. As a result, you will be asked to type a state or province code. At that point, you would type CA for California.

Finally, the list has been trimmed to a manageable number and the system would display all the subscribers named Robert Jones who live in California.

If the list of Robert Joneses living in California were too large to display on a screen, the system would then ask you for the name of a California city where the Robert Jones you are searching for lives.

The directory is particularly helpful when you have lost the User ID number of a subscriber or if you simply want to find out if a friend in another state might be a subscriber.

The third selection from the Subscriber Directory menu allows you to exclude your name and User ID number from the directory if you do not want it listed, or to include it if, after having it excluded, you again want it included. The inclusion or exclusion does not take effect immediately following your request. It usually takes about a week for the change you request to be reflected in the directory.

If you're searching for users with similar interests to yours, or if you want to list your interests for others to see, you can use the Member Directory in any of CompuServe's forums. The Member Directory can be accessed from the Function menu or by typing MD at the Function prompt.

Listings in forum Member Directories are not automatic. You must go to the Member Directory in each forum in which you want your interests to be listed and enter them in that database. For example, if you are an amateur photographer with a particular interest in nature photography, you might go to the Photo Forum (GO PHOTOFORUM), access the member directory and when prompted add the words "nature photography" to your list of interests. Others interested in nature photography can enter the Member Directory area of the Photo Forum, search for the words "nature photography" and the database would automatically present your name, User ID number and complete list of interests to the searcher.

The Member Directory allows you to delete your current entry or modify an entry. It is as simple as choosing the Member Directory function in the forum and choosing the proper option from the Member Directory menu.

These two directories give subscribers broad choices to let others know about themselves and to find others with whom they want to communicate. Both are invaluable tools in making the CompuServe experience more personal and rewarding.

*David Peyton co-authored* How to Get the Most Out of CompuServe *and* Advanced CompuServe for IBM Power Users. *His CompuServe User ID number is 76703,244.*

**PSSST!**

Get behind the scenes with Monitor's "Behind the Screens" section on *Online Today Electronic Edition*. Find out what's *really* going on. Type GO OLT-130 from any prompt on the CompuServe Information Service.

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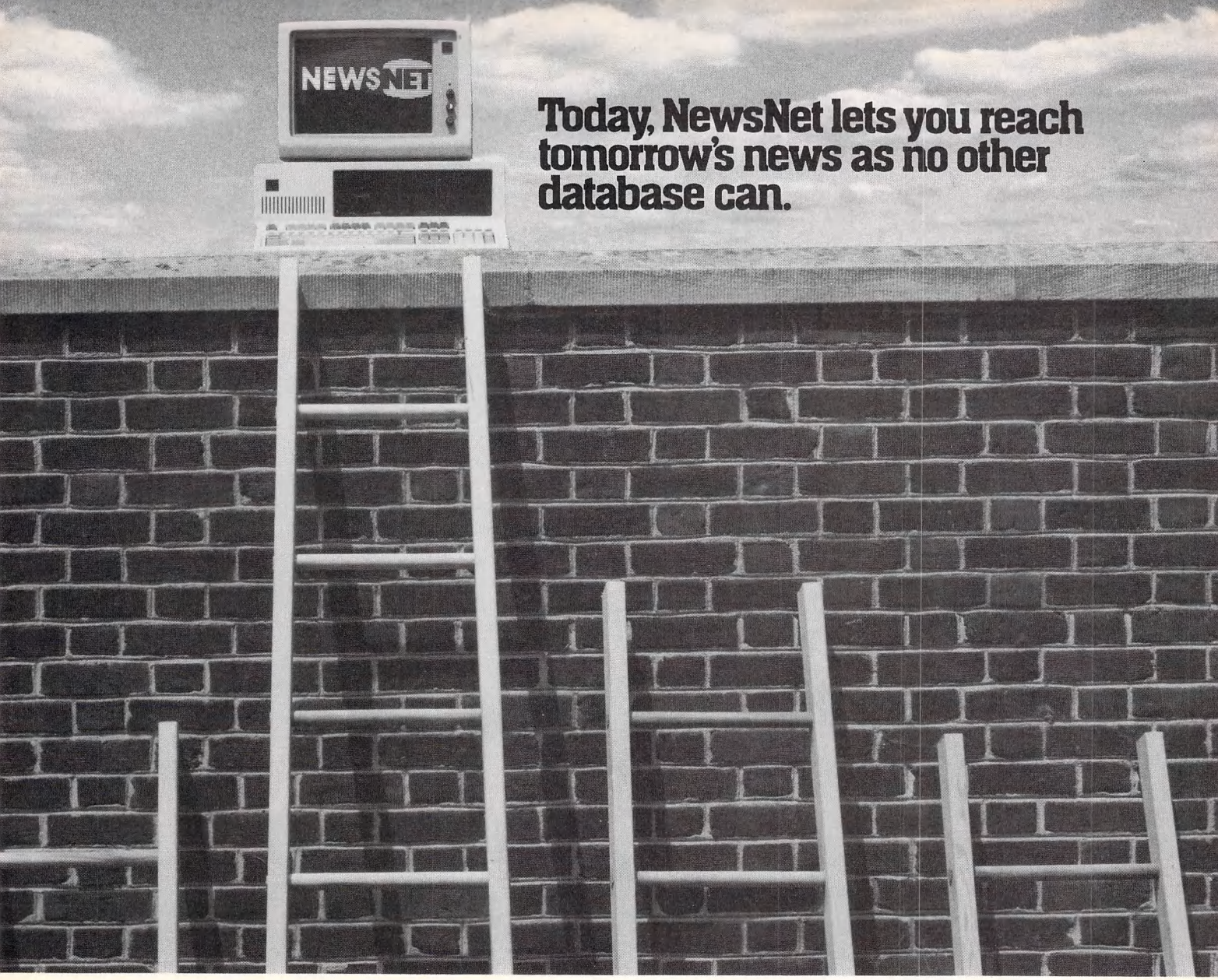


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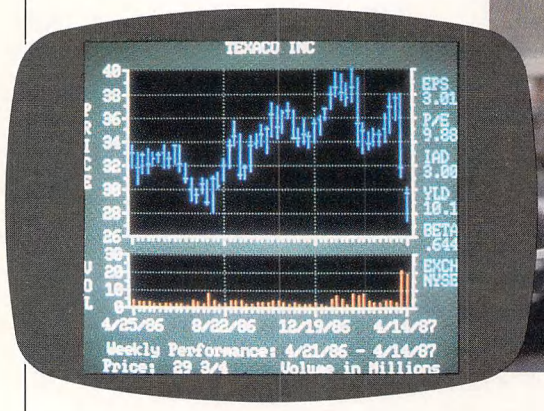
**Investigating investments:** *Herman analyzes online financial information*




# INSIGHTS ON

By Kathy Baird

The world of investments is no longer an uncharted territory to CompuServe subscriber Tom Herman of Hawthorne, N.J., now that online financial information is as close as his personal computer.

Herman co-owns Street Lighting, a design firm that specializes in lighting for parties and special events. Last March, Herman—who had no previous investment experience—began exploring investment opportunities by joining CompuServe's Investors' Forum (GO INVFORUM). He regularly read the posted messages, asked investment-related questions and received answers from other forum members.

Eager to put his newfound investment knowledge to work, Herman assembled a list of potential investments and prepared to analyze them. He downloaded daily pricing data from Quick Quote (GO QQUOTE) and then evaluated comparative performances with two analysis software packages. He obtained his Stock Charting and Technical Analysis program, a charting program that works well with small portfolios, from *Micro Investor* newsletter. When he needed help in learning to use the program, he turned to his fellow Investors' Forum members for tips. Then, he viewed an online demonstration in one of the Investors' Forum data libraries and decided to buy a second piece of analysis software, PC Stock, a fundamental evaluation and portfolio program.

Next, he accessed EXAMINE (GO EXAMINE) to gather such information as 12-month earnings per share, dividend, yield, number of shares outstanding, historical highs and lows, and various measurements of risk.

Based on the information he compiled, Herman narrowed the field of

Garry Burdick

# INVESTING

prospective investments to Toro, Phillips Petroleum and an over-the-counter stock known as Wolverine Technologies. He also studied Lotus and Colorocs Warrants, and in April settled on these two issues as his first investments. Lotus came to his attention when he learned that Harry Knutowski, Investors' Forum administrator, had invested in it. Herman's father suggested that he also look into the Colorocs stock. "The reason I jumped in so quickly is that the market was a bull market from the beginning of the year. Everyone was making money," he says. And Herman was no exception—the Lotus stock made him a profit of $650 in two weeks.

After selling the Lotus stock, he added American Express and Greenwich Pharmaceuticals to his portfolio and now owns GTE stock in his Keough plan. Another Investors' Forum member had told him that the GTE stock was worth studying. "It's very solid and it pays good dividends," says Herman. His other three stocks have not yet performed as well as he had hoped, but he doesn't seem worried. "They're starting to pick up again," he says. He almost sold the Colorocs stock. "I'm waiting for it to reach a certain point. I know what I'm going to sell it at," he says. He also has target sale values for American Express and Greenwich Pharmaceuticals. However, he plans to hold GTE as a long-term investment.

To follow the daily performance of his investments and a select group of other stocks, Herman uses Quick Quote. He refers to OTC NewsAlert (GO OTCNEWS) to check news and trading information on over-the-counter stock issues. "Every day a new stock is added to those tracked by my automated software based on 'mentions' in the Investors' Forum," he says. Herman shares information with others through the forum and then analyzes stocks that they suggest through Quick Quote, EXAMINE, MicroQuote II and OTC NewsAlert. "There are no greener novices than I," Herman says. "But with the aid of the Investors' Forum I am learning faster than I would have expected. At the same time, I can avoid foolish pitfalls and actually make money as I learn."

### Investor Autonomy

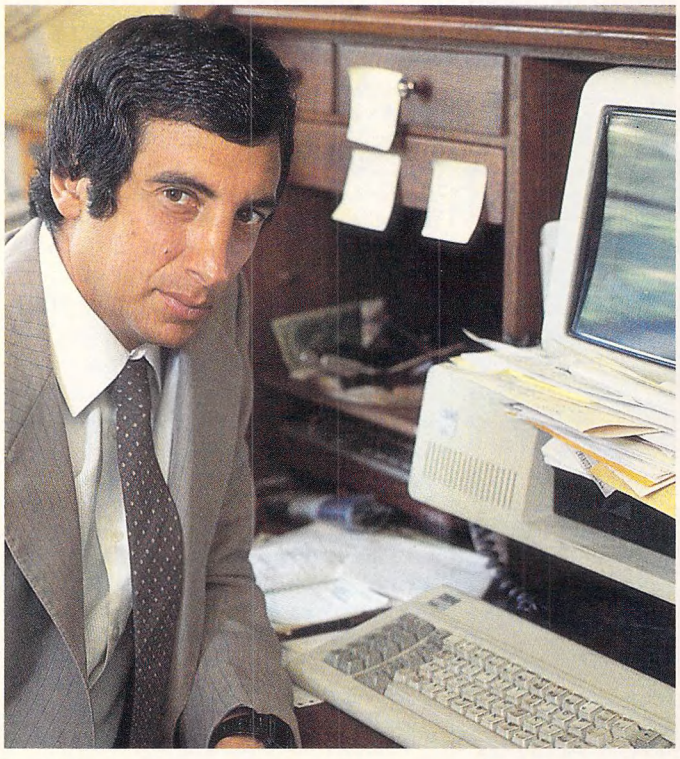
While traditional investors were once dependent on their stockbrokers for ideas and information, that picture is now gradually changing. Highly involved investors such as Herman are increasing in numbers as more people take the responsibility for their investment decisions. "There is a subset of investors who want to do a certain amount of that work on their own," says Scott Clyde, manager of financial products for the CompuServe Information Service. "Investors are getting more sophisticated," agrees Bill Anderson, financial analyst for the American Association of Individual Investors. "They're not relying solely on brokers."

Several trends are influencing this move toward investor autonomy. A larger pool of highly educated individuals means that many knowledgeable professionals feel confident in their own decision-making abilities.

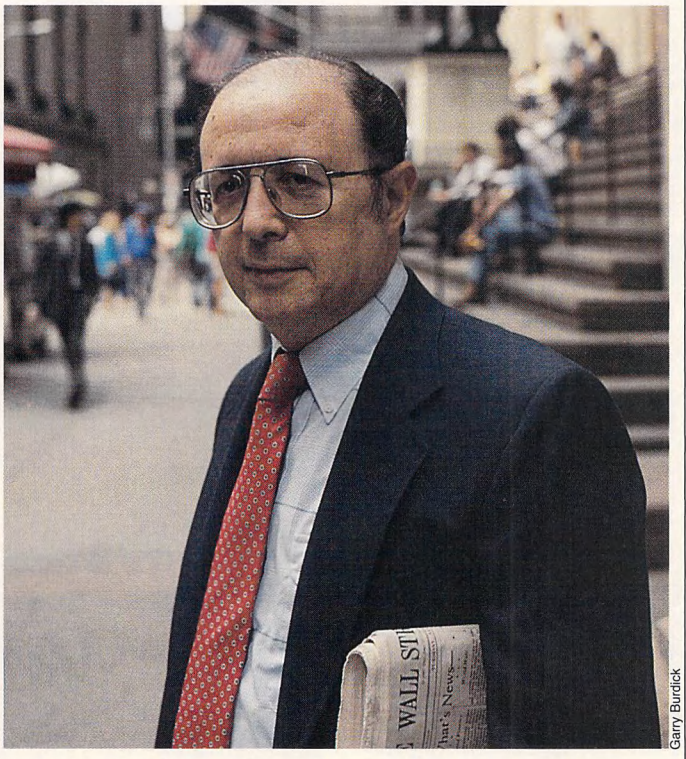
Online brokerage services allow such individuals to use their computers to place purchase orders at their convenience, while the advent of discount brokerage services allows them to save money on commissions.

The proliferation of financial analysis software has enabled investors to comparatively analyze online information and to selectively scan a large volume of information according to their own criteria. "Investors tend to do more of their own research because they have computer tools available to do that research," Clyde says. "Over the last bull market we've seen a lot of individuals either getting back into the market or getting into the market for the first time." He attributes the current high trading volumes to this broader-based individual investing, coupled with more active institutional trading.

High volumes and high market volatility also fuel the trend toward individual involvement in information gathering. Through such involvement, investors



**Designing data interfaces:** *Bernikow markets software*




Garry Burdick

**Investment services to grow:** *Young predicts high returns*

can control their market timing—a crucial issue for those who prefer to trade frequently rather than to hold investments for long-term growth. "There is a lot of microcomputer software related to market timing," Clyde says. "Without a computer, that area of timing is difficult, if not impossible.

"Because of the volatility of the marketplace, we're seeing more interest in getting timely quotes," he explains. "We have more quote-watchers than ever before. And that has required an enormous amount of computer power on the part of people in the marketplace. There is a competitive feeling among investors, with the computer as the focal point of the competition."

To meet the demand for timely quotes in today's high-volume market, CompuServe recently replaced its entire current quotes processor with an expanded facility, increasing its capacity to post information quickly and handle more requests. Quotes for stocks, options, market indexes and several technical indicators are available through CompuServe at a 20-minute delay. Quotes for money market funds, mutual funds and commodities are available at the end of each day. Next-day quotes are offered for bonds, Canadian stocks and more indicators.

CompuServe provides the capability to download data in a file format for such spreadsheet packages as Lotus 1-2-3, Symphony and VisiCalc. Some of the major software authors, though, write packages that require a specific custom interface for the software and another for the mainframe computer before the data can be translated to the correct format for the software. To fill this need, Bob Bernikow of Quantitative Financial Services sells software that serves as a bridge between CompuServe and certain commercially available technical analysis software packages such as MetaStock and Compu-Trac. "With these packages, you can't go directly to CompuServe to get the data because the data has to be presented in a specific format," says Bernikow. The interfaces also make it possible for someone to download data from an online service once and then transfer it to multiple software packages for analysis.

When investment software is used in conjunction with the daily pricing information on securities, commodities and market indexes available on CompuServe, "people can track the price movements of stocks, options, mutual funds and commodities," says Bernikow. Users end up fine-tuning the analysis tools and graphs to meet their preferences. For example, if you don't like the information provider's moving average rules, you can change the number of weeks in a moving average or you can change the comparison data from the S&P 500 to the New York Average.

### Early Stages of Online Investment

Bernikow attributes the growing use of investment software to the expanding availability of computer technology. "The technology is available to anyone with a computer at home, whereas before it was available only to professional users," he says.

Howard Young, editor of *Wall Street Micro Investor*, has also noticed a large increase in the popularity of technical analysis software in recent years. However, many users still spend hours keying in their information prior to analysis, he says.

Young predicts that the use of online investment services is only in its early stages of growth. "People are just beginning to become familiar with this," Young says. "As they see others using it, they feel they have to, too. But the use of computers and online systems still presents a hurdle to the average investor."

A certain level of research skill is needed by anyone using online investment services, according to Young.

While many professionals are able to assemble and interpret online information in meaningful ways, the average investor may not have an adequate level of knowledge to do so. Young expects the number of online investment service users to increase as young people graduate from college with an understanding of computers, as older investors become more familiar with their computers through regular use, and as computers and online services become easier to use.

Anderson of the American Association of Individual Investors advocates the use of a personal computer as a good starting point for investing. "It is best suited for technical analysis. It is good for crunching through moving averages and for portfolio management."

Researching stocks before deciding whether to buy can be done conveniently and effectively online through CompuServe.

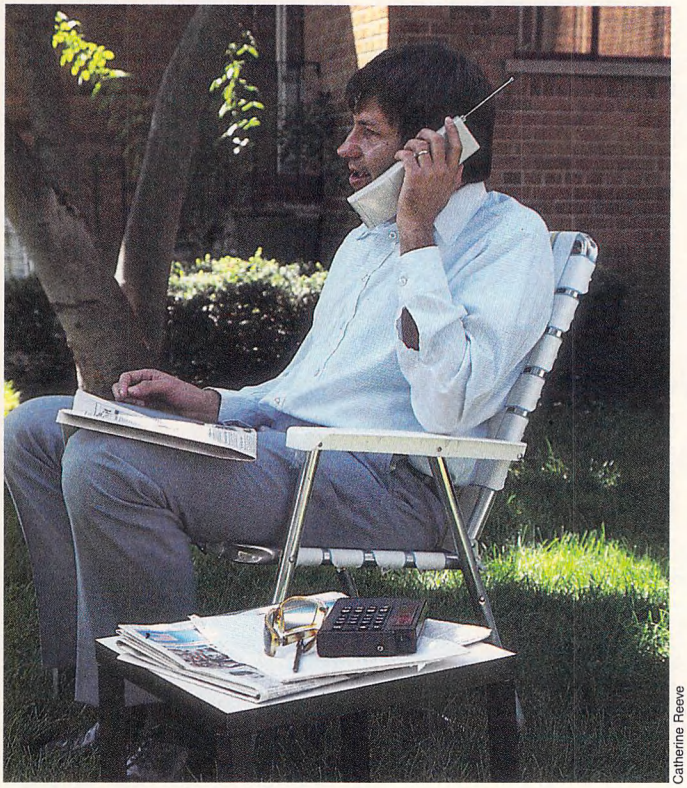
A beginning investor would want to look at pricing information and EXAMINE—as Tom Herman did—according to CompuServe's Clyde. (See related tutorial article on three ways of obtaining pricing information and how to use EXAMINE.) "Also, as a minimum, he might want to check the new Standard & Poor's product (GO S&P), specifically to look at the earnings estimates and what the S&P analyst says is the outlook for that company," says Clyde. "Why not get an independent opinion of what the company's performance is going to be?" Clyde also suggests that a beginning investor use the I/B/E/S Mean Estimate Report (GO IBES). "It will give the user a consensus opinion of the professionals as to what the earnings and growth are going to be," he says.

A more experienced investor might want to study some other information as well. For starters, he could take a closer look at the S&P Online materials. "There's some market activity reporting and performance history numbers in S&P Online that are meaningful," says Clyde. "If you're going to put it in the context of prices, why not also put it in the context of past sales performance?"

Another area worth studying is the I/B/E/S Expanded Report, which provides the *degree* of consensus in addition to the consensus. "If the earnings estimate is $1 and everyone agrees on $1, that's reflected in the price," says Clyde. In that case, the investor may not see the price change very much except for changes in the market in general. However, if the earnings estimate is $1 but one expert says it's going to make 50 cents and another says it will make $2, Clyde says that means there's still a lot of room for improvement or downgrading of the earnings estimate for that stock. "It's more volatile since the analysts can't get a handle on it, so you might want to look at the dispersion to see whether there's a potential for price change." One useful source of information is the Value Line Longer Term Estimates (GO EARNINGS). The object is to obtain as many professional opinions as you can.

An experienced investor who has already checked other sources of information may want to access the Disclosure II database (GO DISCLOSURE). The most obvious reason to use this database would be to analyze the financial performance of a company, according to Clyde. In addition, Disclosure II carries information about a company's management and lines of business. "It's easy to lose track of the direction of the business of many of the conglomerates," says Clyde. "You can find out what lines they're emphasizing, where management attention is focused, the percentages of business in each area and the prospects for growth." Finally, ownership information, such as insiders, institutions and 5 percent owners, is included. Data on more than 9,000 companies is available in the form of online balance sheets and quarterly reports.

A portion of the Disclosure II database, COSCREEN (GO COSCREEN), allows you to screen for investment candidates according to established criteria. Investment prospects can be chosen by examining several variables such as industry, size of company, capitalization, growth, liquidity, return, earnings, cash flow, price/earnings ratio, yield, selling price and volatility in stock price.



Catherine Reeve

**Online brokerages better:** *Pietruk cites recordkeeping capability*

### Trends in Trading

The increasing availability of online investment information has not only spawned the trend toward personal involvement in investment decisions, but has also contributed to the growth of discount brokerage services. Because discount brokers offer no investment advice, they charge lower commissions on transactions than full-service brokers. "Discount brokerages have become more popular each year," Clyde says.

CompuServe offers two online discount brokerage services that allow users to place their orders online: Quick & Reilly's Quick Way (GO QWK) and Max Ule's Discount Brokerage, Tickerscreen (GO TKR). Quick Way accepts buy and sell orders 24 hours a day and offers other non-research brokerage services, such as quote watch, trading and portfolio monitoring. Tickerscreen allows users to place orders at night for execution the following morning. Both services allow you to check commissions prior to purchase.

Some users are attracted to online brokerage services for the wrong reasons, according to Mike Pietruk, also an administrator in the Investors' Forum. They mistakenly believe that they are placing their orders directly with the exchange. In fact, each online order must be re-keyed by the brokerage firm to eliminate the chance of a mistake in the order. "The real reason to use an online brokerage is that it helps you keep better records," Pietruk says.

Bill Coppel, branch manager for Quick & Reilly, which serves as Quick Way's information provider, says online financial services offer "the convenience of placing the order when you want and having a variety of information services that you can download for analysis." Coppel says Quick & Reilly attracts investors of all levels of sophistication. Many discount brokerage customers are cost-conscious individuals who have been active in the market long enough to feel comfortable with their own investment decisions.

Through Quick Way, you can place stock and option orders, then review, change or cancel those orders.

When an order is executed through Quick Way, the new stock appears in your online portfolio file immediately. Issues bought through other brokerage firms can be entered by the user.

The other online discount brokerage service is Tickerscreen, Max Ule's Discount Brokerage.

After opening an account with Ule, you can buy and sell stocks, bonds and options by entering an online order during the night. That order will be posted before the Stock Exchange opens at 9:30 a.m. the next day. During the day, Ule calls users with transaction confirmations, and at night confirmations are sent online.

As the popularity of discount brokerage services has grown, so has the popularity of mutual funds and over-the-counter stocks. These trends are addressed by two CompuServe services: the NoLoad Mutual Fund Directory (GO NOLOAD) and OTC NewsAlert (GO OTCNEWS).

The number of mutual funds registered with the Securities Exchange Commission has quadrupled during the past 10 years and the assets invested in mutual funds have increased 18 times since 1976. "When the market is hot, people tend to get interested in mutual funds," Pietruk says.

"Mutual funds have really become a hot field," agrees the AAII's Anderson. "We think they're great. They offer people diversification at a low cost." Risk is minimized by being distributed among many issues,

# Check the Price

No matter what kind of analysis different investors perform when looking at various investments, one thing is certain: In the end, people buy or sell when the price is right.

Of course, investors differ in what they believe is the right price. That's why for every buyer there is a seller, and vice versa. But no investor could begin to formulate his or her estimate of a "right price" without first knowing what the price is now, and then comparing it to what the price has been in the past.

CompuServe offers several historical pricing programs for accomplishing just this. Beginning with the Pricing History program (GO PRICES), an investor can get historical pricing information on stocks, bonds, options, mutual funds, market indicators and foreign exchange rates. Would you like to have an investment's volume, high/ask, low/bid and close/average displayed for any number of days, weeks or months you designate? If so, then you will want to look into this program.

How about taking the same information and converting it into a graph for quick analysis? Numbers are one thing, but sometimes it helps to actually see the trend of how an investment has performed over time. CompuServe's Price Volume Graph (GO TREND) is an investment tool that was designed with this in mind. All you need to do is specify the investment and the time period, in days, weeks or months, and the TREND program plots the prices, price range and volume for you. If the particular investment was an equity issue, TREND will also provide the EPS, P/E ratio, dividend yield and Beta value.

Still need more information regarding whether or not a stock is trading at or near its highest or lowest quote for a given time period? Then try the Pricing Statistics program (GO PRISTATS). Along with providing the high and low values for the beginning and ending date that you specify, it also provides a summary of what the highest and lowest prices and volumes were, the dates that they occurred, and their averages and standard deviations.

Suppose you had a particular company in mind and that you checked it out in all three of the above programs. How could you get a report that provides trading information covering the stock's 52-week high and low market price? Or risk information that displays whether the stock is as risky or more risky than the market? How about capitalization information that tells you the number of shares outstanding? Or maybe descriptive information that details which exchange the issue is principally traded on? CompuServe's Detailed Issue Examination program (GO EXAMINE) provides the answers to these questions and more. Because it offers a wide range of information on an investment—everything from what the Standard & Poor's rating is to how the dividends are paid—it is a logical next step for the inquisitive investor.

Armed with these and a full complement of other CompuServe investment products, today's online investor is poised to place a better bet no matter what the price.

To access the PRICES, PRISTATS, TREND, and EXAMINE programs, type GO SECURITIES at any CompuServe prompt.

*— J. David Edwards*

while diversification is possible even with a small investment.

The NoLoad Mutual Fund Directory helps individual investors identify mutual funds that meet their needs, regardless of their level of investment experience. "If you have never thought about investing in mutual funds, it will help determine what your goals are," says Laura Berger, executive director of the NoLoad Mutual Fund Association. "It will give you assets of funds and their investment objectives." For current investors in mutual funds, the service provides information on the latest types of funds on the market.

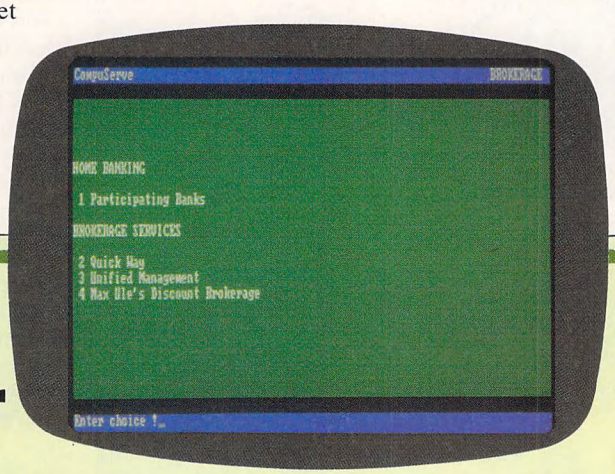
CompuServe also provides end-of-day and historical pricing information on mutual funds and money market funds as part of Quick Quote and MicroQuote II. (See related article.) Although speculative in nature, over-the-counter stocks are another popular investment. Because much national attention is focused on larger stocks, many individual investors choose to follow the smaller, less-prominent regional companies offered on the over-the-counter market.

During the past few years, trading on over-the-counter issues has doubled every year. "The trading on OTC issues is now the third largest market in the world," says Jim Buckner of Comtex Scientific, which serves as information provider for OTC NewsAlert. The over-the-counter stock market is exceeded only by activity on the New York and Tokyo exchanges.

OTC stocks often have lower prices than those on the other major markets—frequently as low as $1 to $6 per share. "OTC is for all the new high-tech company start-ups," says Buckner. Investors looking for the next Apple Computer investment success story may do well to examine over-the-counter stocks to identify small but growing companies. However, investors should be aware that although OTC stock issues offer the potential for high rewards, they are also high-risk investments.

The searchable OTC NewsAlert database provides information on OTC company activities, including reports on earnings, tender offers and SEC filings. Significant news, such as new product introductions and noteworthy sales contracts, is also included. "In many cases, there is no other source of consolidated information about these issues," says Buckner.

Online investment services offer several advantages over traditional print media, including immediacy of information and the ability to ask questions. Computers also allow data to be trans-




# Place the Order

If someone were to ask you what qualities you would like to have in a broker, what might you include? Maybe you've envisioned a broker who is open 24 hours a day, competitively priced and well-informed on the market and on your account. Your ideal broker is readily accessible, so that you don't have to drive across town to meet or leave numerous phone messages. If this is what you're looking for in a broker, you'll want to look into Quick Way and Tickerscreen, two discount brokerage services available to CompuServe subscribers.

Beginning with Quick Way, Quick & Reilly's online discount brokerage service, the answers to the above questions are as close as your terminal. Are your current brokers standing by the telephone at 1 a.m., waiting to take your order? Probably not. But with Quick Way you can enter an order to buy or sell a security online anytime, even when the market is closed. Quick Way will have it ready for execution on the floor of the Exchange the moment the market opens.

In addition, with many brokers you have to wait until they call you back to confirm that an order was placed. This can take up to an hour. With Quick Way, your computerized buy or sell order is completed and confirmed immediately, right on the screen.

Is all of this expensive? Not when you consider that Quick & Reilly is one of the nation's top discount brokerage firms, with representatives in more than 44 branch offices. Besides, you can find out for yourself with Quick Way's commissions calculator. Simply indicate the number of shares you wish to trade, and the unit price, and Quick Way will instantly indicate your transaction cost.

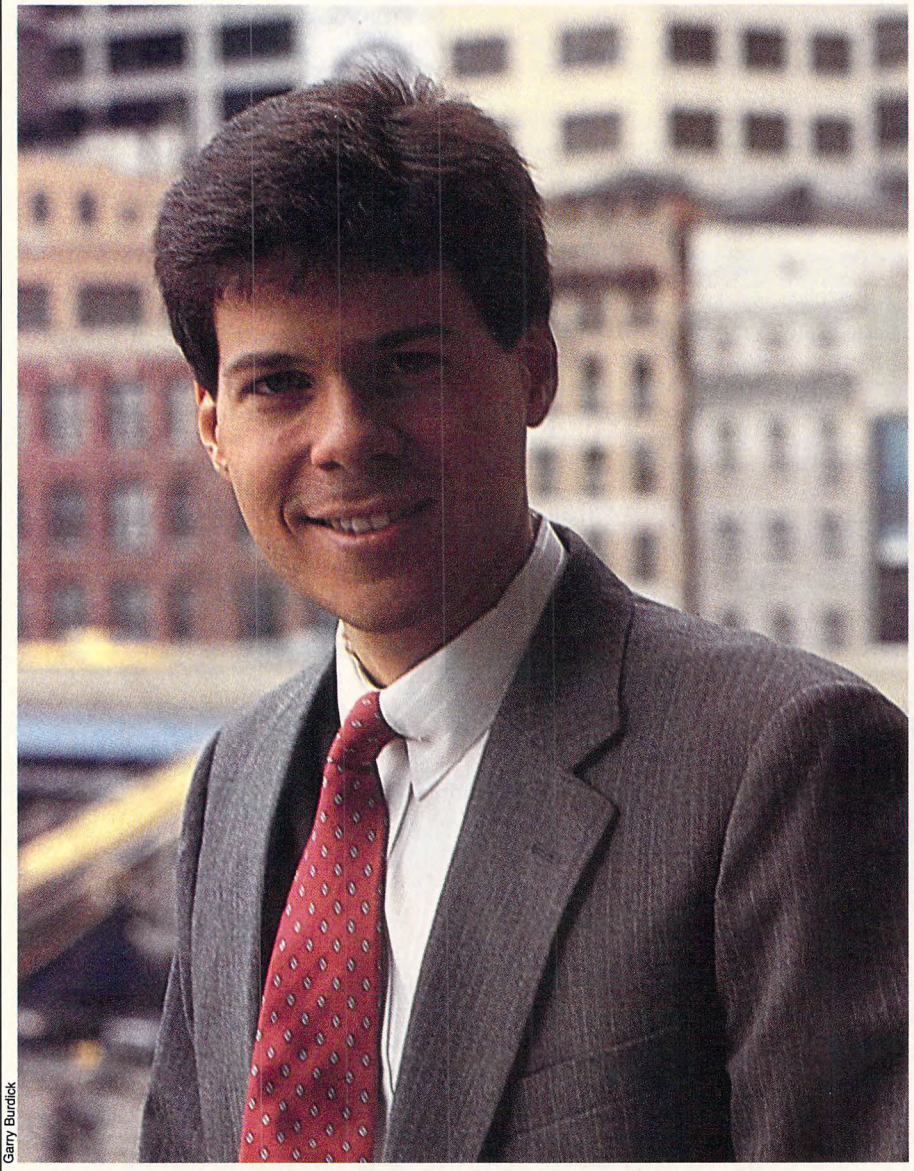
In addition, users can maintain records on securities and portfolios linked to accounts at Quick & Reilly. Account information is updated each time the investor makes a trade. And if the trade closes a position, the investor's tax records are instantly updated as well. Of course, you can review your investments online at any time.

Care for a demonstration? Simply type GO QWK and you're on your way.

Not to limit you to one online brokerage alternative, CompuServe also offers its subscribers Max Ule's Tickerscreen (GO TICKER). Like Quick Way, Max Ule provides many of the same discount brokerage services, such as calculating your commissions, getting information on various investments and checking on your account. But there's more. Are you a nighttime investor? Max Ule offers after-hours entry of buy and sell orders for execution when the market opens. The service also offers some unique products such as PC-Venture Capital, Stock Market Pulse and Fund of the Month.

Add to these brokerage services the current research products available on CompuServe, such as S&P Online, Value Line, I/B/E/S, Disclosure II and a complete line of financial programs, and there are even more reasons to try an online discount brokerage service. To access the brokerage services on CompuServe, type GO BROKERAGE.

*— J. David Edwards*



Garry Burdick

**Improving the odds:** *DiMino says CompuServe helps investors develop skills*

ferred in privacy, without talking to a broker.

Before actually entering the market, it's a good idea to practice your investment strategies by setting up a "shadow portfolio" to fine-tune your approach. This can be done through the Portfolio program on CompuServe (GO PORT). An imaginary portfolio serves more as a way to test strategies than particular stocks, since the same stocks will not necessarily repeat their performances.The same strategies can then be re-used with actual investments.

### Keeping Track of Investments

Once an investment is made, the buyer needs to assume ongoing responsibility for holding that investment by following stock prices and related news.

CompuServe offers several sources to help investors stay abreast of business news. Through CompuServe's Executive News Service (GO ENS) on the Executive Option, you can create an electronic clipping folder according to desired topics or company names and specify which news wires you would like to have monitored. The Associated Press, *The Washington Post*, Reuters and OTC NewsAlert all can be clipped through ENS. Each day, related articles from the online news wires you select will be automatically clipped and stored in your folder for later reference.

Articles available through Reuters, an internationally recognized news leader, are designed mainly for the professional stockholder. Coverage includes individual companies, governments, foreign exchange markets, the US stock market and how other types of markets affect the price of a company's stock. Reuters also includes analysts' comments on company, industry and economic news.

OTC NewsAlert describes various activities that could affect stock prices of small companies that trade over-the-counter. It is available as a searchable database and as a news wire. The database, which is the only consolidated source of electronic information on over-the-counter companies, contains Recent OTC News and Recent/Historical OTC News. The major benefit of the service is the readily available information on the approximately 20,000 companies whose stocks are available over-the-counter but are not listed with the NASDAQ automatic quotation service.

Investors who assume responsibility for their own investment decisions also need to understand basic investment principles and be willing to invest time in staying informed about economic trends and market developments, Pietruk says.

### An Online Idea Exchange

Investors make their biggest mistakes through greed, Pietruk adds, noting that most investors set earning goals but not loss goals. "You need a plan—where you want an investment to lead you and where you will get out if you're wrong. Let your profits run and cut your losses short," he says. One rule-of-thumb is to sell a stock that loses more than 5 percent of the original investment. This strategy will prevent extensive loss.

To help investors learn from each other, the Investors' Forum offers online files, discussions with other users and periodic online conferences with knowledgeable individuals. One recent conference featured a Japanese banker who discussed economic relationships between the United States and Japan in light of the US government's recent trade restrictions.

The forum's data libraries contain public-domain software that is helpful in calculating averages and rates of return and in creating graphs. Two especially helpful files in Data Library 15 are BOOKS.MKT, which lists books

about the stock market, and CHKLST.STK, which provides a list of stock market do's and don'ts.

Section 15 of the Investors' Forum is entitled "The Novice Investor." "We seek and encourage the new investor to ask any and all questions he or she may have on investing," says forum administrator Pietruk. CompuServe's Scott Clyde suggests the Investors' Forum, especially to inexperienced investors. "The Investors' Forum takes people who are unsure of their investment abilities and gives them confidence," he says.

Many forum members are investment bankers or high net-worth individuals who invest for a living. "The key is feedback," Clyde says. "The forum members can answer your questions."

Pietruk encourages users to ask questions in the forum. In fact, questions about how to use various other CompuServe financial services are also answered there. Still, he cautions users to make their own judgments about the quality of the information received from other forum members since suggestions are only as good as their sources. "Investors should view us as a resource and not as the final determinant of what they should do with their money," he says.

"It is becoming more difficult to keep abreast of the burgeoning number of new financial products," says Pietruk. "The Investors' Forum can serve as a clearinghouse for the exchange of ideas."

"One of the best features of the messages on the Investors' Forum is not necessarily finding stocks," adds user Tom Herman. "For me, it has been a shortcut in learning what to watch in the financial world in general. The information about gold prices, inflation, Federal Reserve moves and international situations is all new to me, and members here are pointing out the latest developments every day."

Agrees forum member Andre DiMino of Hillsdale, N.J., "I have found this forum invaluable in my education and application of investing and trading principles." DiMino says the use of CompuServe for securities information, economic conditions and company screening has helped him in his own investment education process. "CompuServe's services have made me a better investor. By obtaining accurate, up-to-the-minute information, and by sharing ideas and observations with others in the forum, one cannot help but become more astute on the market and investing in general," he says.

In addition to the Investors' Forum, CompuServe offers the NAIC (National Association of Investors Corporation) Forum (GO NAIC). This forum is another information-exchange service geared primarily for individual investors who are interested in sharing information about their favorite stocks. "The focus of NAIC is long-term investment through fundamental stock analysis," says Pietruk, who also serves as a forum administrator of NAIC.

NAIC membership provides a cost break on small stock orders for certain companies and often eliminates the minimum commission charged with the purchase of orders as small as one share. This allows users to diversify their own portfolios with less money.

Files of special interest, located in Data Library 2 include LCP.TXT, which briefly describes NAIC's Low Cost Plan for purchasing a select number of stocks from cooperating companies, and MAIL.TXT, which describes how to get more information about the National Association of Investors Corp. The NAIC Forum also offers in-depth online studies of various companies, with a new company featured in the "Corporate Reports" section each month. Another section, "My Favorite Stock," is available for members to share their personal preferences.

Investors and would-be investors should broaden their horizons by exploring online investment services, according to Investors' Forum member DiMino. "Take the time to learn all that is available and how to use it. Join the forums and don't be afraid to jump in at any point."

DiMino cautions that though the market as a whole is doing well that doesn't necessarily mean that it's easy to make money. "Success in investing takes a good deal of work, patience, nerves of steel and a few doses of good luck. The online services on CompuServe—if you use and apply them—can definitely help better the odds."

*Kathy Baird is a free-lance writer based in Columbus, Ohio. Her CompuServe User ID number is 70007,2277.*

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## New Forum Files Emphasize Efficiency

The data libraries in CompuServe's forums are filled with thousands of programs and textfiles. The following are a few of the files uploaded to the data libraries in recent months. For a more up-to-date list of uploads, check the "Uploads" columns in *Online Today Electronic Edition* by typing GO OLT-3700 at any CompuServe Information Service prompt. Columns are added twice monthly.

### AMIGA FORUM
(GO AMIGAFORUM)

**Efficient Interface**—A program that can be used instead of the WorkBench or the CLI window as a more effective system/user interface. The program provides instant access to various Workbench and CLI commands by simply selecting control buttons. A total of 28 control buttons can be defined by users and 10 text input buttons can be defined to access any storage device. File JOBS21.ARC in Data Library 9.

### ASHTON-TATE FORUM
(GO ASHFORUM)

**Litebar Menus**—Quick Litebar menus from dBase and more. Contains window scrolling, fading, highlighting, coloring, zapping, filling, hiding, screen save/restore, 43-line EGA support, help prompts. File LITEBA.ARC in Data Library 2.

**Framework Aide**—FRED programming assistant for Framework II. It uses a bottom-line menu to allow you to select any FRED function for a description or a printout. Can be used to build formulas easily using only the arrow keys and Return. File HELPER.FW2 in Data Library 3.

**dBase Utility**—A utility for dBase II, III and III+ PRG files. It aligns all IF, END IF, DO WHILE, ENDDO, DO CASE and ENDCASE statements and connects the beginning and end of each with characters. Checks for errors in control and syntax. File DSCAR2.ARC in Data Library 2.

### COMMODORE MUSIC, GRAPHICS AND GAMES FORUM
(GO CBMART)

**Command Builder**—A command builder for the *Elite* space game, which allows the player to add any equipment such as military lasers and hypergalactic drives. Also lets player add cargo, fuel, cash and even change legal status. File ELITE.IMG in Data Library 8.

**Joplin Rag**—Scott Joplin's "Maple Leaf Rag," a Master Composer File. File MAPLE.BIN in Data Library 4.

**Text Adventure**—*Farragut's Fortune*, an entry-level text adventure game for the Commodore 64. File FARRAG.BIN in Data Library 9.

**CAD File**—A file that contains approximately 50 electronic schematic symbols for use with Steve Nye's CAD program. File ELFIGS.BIN in Data Library 12.

### EDUCATION FORUM
(GO EDFORUM)

**Help for Gifted**—A partial transcript of conversations in the Education Forum about how parents of gifted children cope and try to meet the needs of their children. File GIFMES.TXT in Data Library 6.

### IBM NEW USERS FORUM
(GO IBMNEW)

***Castaways***—A text adventure game from Buttonware. You're the first mate of a cargo ship en route from Australia to Fiji when a storm drives you on a reef. You manage to survive but you are totally alone and without supplies. Appropriate for those who are relatively new to text adventure games. File CASTAW.ARC in Data Library 3.

### IBM SOFTWARE FORUM
(GO IBMSW)

**DOS Help**—Help programs for use with DOS 2.1, DOS 3.1 and DOS 3.2. Program is non-resident and operates like an extension of DOS. User can define help files to further enhance operation of the program. Files are HELP21.ARC, HELP31.ARC and HELP32.ARC in Data Library 1.

**Copy to Floppy**—A program to copy files from a big directory or subdirectory on a minimum number of floppies. Files copied are still executable from the floppy. Tells number of floppies needed to copy a directory. File FILL.ARC in Data Library 3.

**Filename Enhancer**—A directory utility that allows you to add descriptions to filenames. File WHAT2.ARC in Data Library 1.

**Find Utility**—A text-search utility similar to DOS' FIND but smaller and much faster with multi-file capability. By Chris Dunford. File FGREP.ARC in Data Library 2.

**Tax Help**—An easy-to-use, menu-driven program that will calculate federal tax exemptions and determine any additional withholding amounts in accordance with the 1987 tax laws. The program allows you to plan various tax withholding strategies and provides printouts of various options. File TWP.ARC in Data Library 5.

### INVESTORS' FORUM
(GO INVFORUM)

**Securities Program**—A binary file for Commodore 128 computers, which will evaluate covered call and writing positions. File COVOPT.C28 in Data Library 3.

**Real Estate Analyzer**—A BASIC program for IBM PCs and compatibles. Completely analyzes real estate investments with rental income expected. Inputs include costs, mortgage, unit rents and more. File RE-INV.BAS in Data Library 6.

**Option Valuation**—A complete option valuation program for the IBM PC and compatible machines, designed by a commodity trading adviser. Shareware program computes fair market value, the value of puts and calls, implied and historical volatility and more for any futures contracted on the OEX. File KOPTIO.ARC in Data Library 3.

### MODEL 100 FORUM
(GO M100SIG)

**Financial Package**—A financial program for Model 100, 102 and 200. Has 20 loan and investment calculations. File FINPAK.BA in Data Library 4.

**Linefeed Utility**—A linefeed utility for IBM PCs and compatibles, which will add line feeds and carriage returns to all files imported into an IBM PC or compatible from any Model 100, 102 or 200. File PC-LF.BAS in Data Library 3.

### SCIFI FORUM
(GO SCIFI)

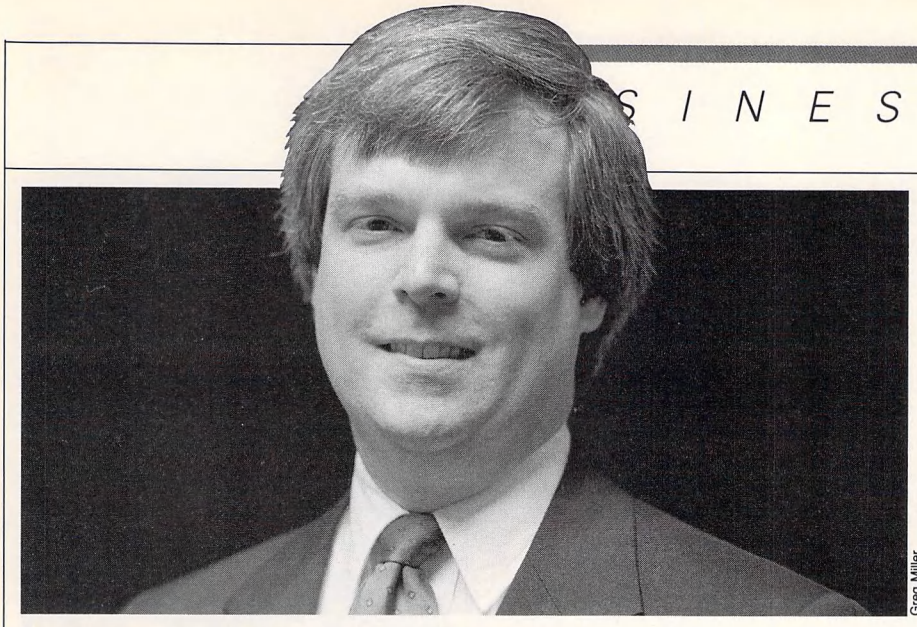
**Nebula Winners**—Winners of the 1986 Nebula Awards. File NEB86.WIN in Data Library 3.

**Author's Conference**—Transcript of a formal conference with Walter Jon Williams, author of *Hardwired* and *Voice of the Whirlwind*. File WJWILL.CO in Data Library 8.

### WORK AT HOME FORUM
(GO WORK)

**Multi-Level Marketing**—An objective essay and evaluation of the various multi-level marketing plans being offered to entrepreneurs. File MLMCMP.TXT in Data Library 16.

*David Peyton co-authored* How to Get the Most Out of CompuServe *and* Advanced CompuServe for IBM PC Power Users. *His CompuServe User ID number is 76703,244.*




**Revealing records:** *Clyde says Disclosure II is the source*

## Disclosure II Reveals Company Information

The aptly named Disclosure II database, available through the Executive Option, fully lives up to its name by revealing reams of valuable financial information about more than 9,500 companies. During October, you can discover Disclosure II without upgrading to the Executive Option, since for this one month CompuServe is making it available to all subscribers.

Financial background on companies includes the three most recent income statements and two most recent balance sheets. Also included are key financial ratios, along with sales and operating ratios for each of the company's lines of business and lists of major shareholders.

Much of this information is unavailable through a single source elsewhere, according to Scott Clyde, manager of financial products for the CompuServe Information Service. "It is significant that Disclosure II covers so many companies. Individual investors can use this information as the basis for making informed decisions about when to buy and sell securities by comparing the financial data on various companies," Clyde says. "Maybe you've received a hot tip somewhere or your broker has told you that a particular stock is undervalued. You can look into Disclosure II to check additional information to help you understand why the stock is priced as it is.

"Executives may want to use Disclosure II to check salaries and benefits of various companies," he adds. "Owners of small businesses may want to use the database to research the competition since smaller companies having revenues of less than $20 million are also listed on Disclosure II—it covers the 4,400 companies on NASDAQ plus a few thousand that are not." NASDAQ stands for the National Association of Securities Dealers Automatic Quote System. It is a network of computers through which an average of more than 100 million shares are traded electronically each day.

Disclosure II company records are compiled from financial and text data from the Securities and Exchange Commission filing documents and company annual reports. Financial figures and subsidiary names on Disclosure II are taken from 10K and 10Q reports, while listings of company officers and directors come from proxy statements. From annual reports come management discussions and presidents' letters. A related offering called Disclosure/Spectrum ownership database contains more than 200,000 specific owners grouped into categories of institutional, 5 percent beneficial and insider owners.

To learn more about Disclosure II and other services available through the Executive Option, type GO EXECUTIVE at any system prompt. A one-time $10 upgrade fee is charged to new Executive Option subscribers, who are also subject to a $10 monthly minimum user charge.

There are surcharges for use of Disclosure II and Disclosure/Spectrum. So that users can try Disclosure II and determine its value before incurring surcharges, reports on H&R Block, CompuServe's parent company, are free of surcharges. Surcharges for other reports range from $2.30 to $13 depending on the report. For exact transaction charges, refer to Online Rates (GO RATES).

*— Carole Houze Gerber*

## Business Briefs

### Mutual Funds Prices Posted Earlier

Prices for mutual funds are now available for display or downloading daily at about 6 p.m. via CompuServe's Quick Quote service.

Quick Quote is CompuServe's current quotation service and includes stock quotes and many stock indexes, updated daily 20 minutes after each trade occurs. Closing stock quotes are available after 4:50 p.m. GO QQUOTE

### Lotus Adds to Distribution

Within the World of Lotus, CompuServe subscribers can now download Lotus drivers, add-ins, DIF file specifications and related documentation files with either B-protocol or XMODEM file transfers.

Equipment drivers for Lotus products are available for AMT, Data South, IBM, Epson, Hewlett-Packard, Moniterm, Quadram, Xerox and a variety of graphics printers.

Available add-ins include Macro Conversion Aid, which converts Lotus 1-2-3 macros to Symphony Command Language programs, and Symphony Range Input Command, which adds the equivalent of the 1-2-3/Range Input command to the Symphony SHEET window commands. GO LOTUS

### Borland Expands Language Support

Borland International will support users of its new programming languages including Turbo Basic (in Subtopic and Data Library 9) and Turbo C (in Subtopic and Data Library 11).

Within the Borland Programming Languages Forum, you can receive support for Borland International's other programming-related products. GO BOR100

### MicroPro Forum Adds Support

The MicroPro Forum has added support for WordStar Professional Release 4, the most recent release of MicroPro's word processing program. The forum data libraries now contain an update for WordStar 4 printer drivers, and install and WSCHANGE programs. New Xerox printer support and other helpful files are also available.

The data libraries provide a WordStar printer driver's source code for users who program their own printer drivers and a utility to move printer patches from WordStar 3.3 to WordStar 4. GO MICROPRO

## New S&P Online Offers More Data, Services

No matter how far you live from New York City, S&P Online can provide you with investment information and advice straight from Wall Street.

S&P Online, which replaces the Standard & Poor's General Information File previously available on CompuServe, provides more current information through more menu options on more companies than ever before—4,700 to be exact.

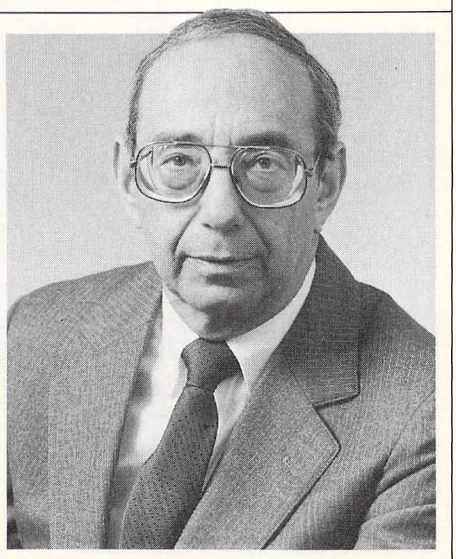
How much more? Well consider that the previous number of companies covered was less than 3,500. Add to this an expanded earnings report. Now include an earnings estimate on all major companies. And top it off with S&P's newly offered dividend, balance sheet, income statement and stock market activity information, and you will find that you have a powerful investment tool. Not surprisingly, online users receive access to exactly the same information used by brokers and other financial professionals.

The inclusion of weekly updates should make S&P Online attractive to individual investors and professionals engaged in financial planning for clients, according to Joseph Oppenheimer, Standard & Poor's senior vice president and general manager of electronic information services. "These updates will include major corporate developments, new earnings reports, changes in dividends, stock splits and other information that may affect the price of a stock," Oppenheimer explains. "In an average week, these types of changes will mean that 600 or 700 companies will be updated. In an average month, there will be new data on about 2,500 of the database's 4,700 publicly-and privately-held companies," he adds.

Because more information is now being offered, the surcharge for S&P Online is $1 for each company listed. Although this is an increase from the surcharge applied to Standard & Poor's General Information File, the increase in value to the customer is substantial, according to Scott Clyde, manager of financial products for the CompuServe Information Service.

In an effort to prove to you how good the new product really is, CompuServe and Standard & Poor's are making S&P Online available to all CompuServe Information Service subscribers free of surcharge for the month of October.

Consider that the database now includes coverage of every stock on the New York Stock Exchange, the American Stock Exchange and more than 2,000 of the over-the-counter stocks listed on NASDAQ. Also consider that in addition to the company information included in the old Standard & Poor's General Information File, the new S&P Online includes regularly updated data on company dividends, current ratios, average daily trading volume, high and low stock prices for the year, and much more. Also online will be a directory of the companies included in the calculation of the S&P 500 Index and the subindexes for specific industries. Oppenheimer believes investors will be particularly interested in another new feature—continuously updated investment ideas from Standard & Poor's analysts.



**Updating S&P Online:** *Oppenheimer*

"The investment ideas are categorized to meet the needs of a variety of investors," Oppenheimer explains. "They include recommendations on emerging growth companies that entail some investment risks; long-term growth for more conservative investors; income-total return investments for those even more concerned with safety; speculative-cyclical investments, which involve greater risk; and special situations." This information carries a surcharge of $2 per session, which will be waived for all subscribers during the month of October.

If you care to track the best and worst performing industries or to look at the individual companies that make up a particular industry, then look no further than S&P Online. Particular industries and companies can be easily identified using search criteria based on S&P codes.

If you're a first-time user, Oppenheimer suggests you take a look at the section titled "Using S&P Online," which describes the most efficient way to use the database. Another section, "S&P Terms and Definitions," provides additional information for first-time users.

To access S&P Online, type GO S&P at any prompt on the CompuServe Information Service.

*— Carole Houze Gerber*

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## Executive Option: Not for Executives Only

You needn't be an executive to enjoy the VIP treatment offered through the Executive Option, where subscribers receive access to exclusive databases, valuable merchandise offers, discounts and other "perks." During the next few months, CompuServe will be offering without surcharge one Executive Option product per month to all subscribers.

Among the privileges offered to those who pay the one-time $10 upgrade fee to select the Executive Option are a bonus gift, six months of free storage for personal files along with a 50 percent increase in storage space, a 10 percent discount on most products, and special direct marketing rates for goods and services sold online. Executive Option subscribers also receive access to exclusive databases including the Executive News Service, Disclosure II, I/B/E/S, Securities Screening, Return Analysis, Company Screening and SUPERSITE. Executive Option subscribers are subject to a $10 monthly minimum.

According to Scott Clyde, financial product manager for the CompuServe Information Service, a lot of thought went into providing useful and well-organized Executive Option database services. "There's a huge universe of data out there," he says. "And what we have on the Executive Option is extensive. But the most important thing we supply is added value—that's where the screening utilities and other programs we offer along with the raw data become useful to the consumer because these tools are not readily available elsewhere."

For example, subscribers can use the Executive News Service to set up a personal electronic "clipping folder," into which clips from Reuters News Service, the Associated Press, *The Washington Post* and OTC NewsAlert may be stored for review at a convenient time. Simple commands make accessing the types of stories you want to clip a quick process—and all ENS commands, except for folder names and two-letter wire codes, can be abbreviated to three characters.

To quickly find current financial statements and descriptions on more than 9,500 companies, the Disclosure II database is the place to look. Based on reports filed by law with the Securities and Exchange Commission and on the companies' annual reports, the database offers a compendium of information obtained from the New York Stock Exchange, American Stock Exchange, National Association of Securities Dealers and state agencies.

Disclosure/Spectrum lists those who own 5 percent or more of a company's stock as well as insiders and institutional investors who own the stock. By using Disclosure Company Screening and MicroQuote's Securities Screening, subscribers can scan data on more than 9,000 companies and 70,000 securities.

The Institutional Broker's Estimate System (I/B/E/S) provides a weekly update of anticipated earnings and growth for 3,800 companies. More than 2,700 analysts at 135 brokerage and institutional research firms contribute their estimates. For each company the Mean Earnings per Share Report shows the average of these estimates and the degree to which they have changed. An expanded report also shows the number of analysts following the company and the extent to which their estimates agree. Lack of agreement may forewarn of future changes in price.

Also available to Executive Option subscribers are demographic analysis services to help identify prime customers and learn where they are located. SUPERSITE is a powerful demographic retrieval and reporting system that offers demographic and sales potential reports that cover income, housing, education, employment, general demographics and forecasts. The sales potential reports focus on retail business and consumer financial institutions. These reports measure consumer spending power for specified geographic areas in the United States. Families who are relocating will be interested in the Neighborhood Report (available to all CompuServe subscribers), which provides current demographic statistics by ZIP code on average age, income levels, home values and other data of interest to families moving to new communities. The US-State-County Report provides similar information for larger geographic areas, such as counties.

To examine the Executive Option service tier on CompuServe, type GO EXECUTIVE at any system prompt. Complimentary tours of these premium services are available, as is six hours of usage credit to apply toward product surcharges or connect time during your "test drive" of the service.

*— Richard A. Brownewell*

**Could *Your* Business be Affected by Happenings in the Computer World Today?**

Find out in *Online Today Electronic Edition*. GO OLT-90 from any prompt on the CompuServe Information Service to get daily-updated computer news.

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## For More Business Information

To obtain more information about capabilities offered to CompuServe's business information customers, contact the CompuServe branch sales office nearest you:

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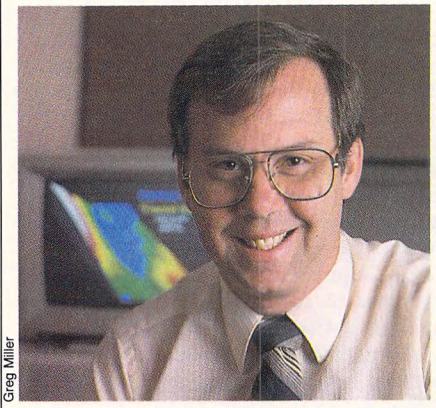
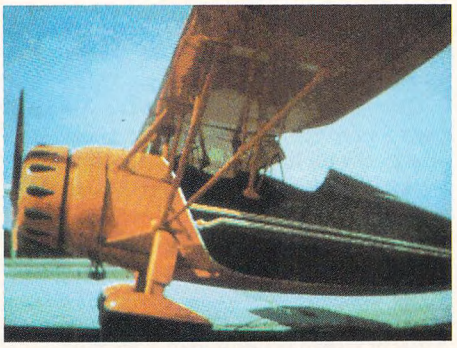
| **Irvine, Calif.** 714/752-7240 | **Miami, Fla.** 305/264-6094 | **St. Louis, Mo.** 314/241-0700 | **Dayton, Ohio** 513/223-6875 |
| **Los Angeles, Calif.** 213/216-5867 | **Atlanta, Ga.** 404/231-1440 | **Parsippany, N.J.** 201/898-1944 | **Toledo, Ohio** 419/243-2600 |
| **San Francisco, Calif.** 415/777-2737 | **Chicago, Ill.** 312/693-0100 | **New York, Commercial** 212/486-2440 | **Philadelphia, Pa.** 215/563-7607 |
| **Santa Clara, Calif.** 408/727-1468 | **Indianapolis, Ind.** 317/635-9686 | **New York, Financial** 212/668-0470 | **Pittsburgh, Pa.** 412/391-8845 |
| **Denver, Colo.** 303/629-5514 | **Louisville, Ky.** 502/585-4106 | **Cincinnati, Ohio** 513/771-8111 | **Memphis, Tenn.** 901/452-8251 |
| **Westport, Conn.** 203/222-1853 | **Boston, Mass.** 617/235-0772 | **Cleveland, Ohio** 216/241-6818 | **Dallas, Texas** 214/953-0207 |
| | **Detroit, Mich.** 313/362-1860 | | **Houston, Texas** 713/237-8582 |



Greg Miller



**Developing decoders for GIF:** *Wilhite works with many micro models*

# Computer Users Choose GIF

***Graphics Interchange Format Focuses on Clarity, Flexibility***

Horror stories about incompatible microcomputers may be humorous when everyone is in a good mood, but they are certainly the nemesis of any serious computer user. The frustration is no laughing matter when a person wants to transfer some data or a graphics image, and the system doesn't cooperate.

Both hobbyists and professionals have been trying to develop the programs and equipment that will come close to solving incompatibilities and let machines "talk" to one another. Graphics fans simply want to be able to upload or download graphic images in some sort of reasonable time frame. Much progress has been made in text-file transfer, but graphics has presented a much more complex challenge.

Now, with the introduction of Graphic Interchange Format (GIF)—pronounced "jif"—a universal exchange format for high-resolution graphic images is available to microcomputers without regard to hardware compatibility. The beauty of the GIF concept is its flexibility. Beyond overcoming the hardware incompatibility issue, it stores and transmits raster-based graphic data in a compressed form. "A sophisticated compression algorithm makes it the major reason that people would use a service such as CompuServe to exchange graphics screens," says Craig Knouf, product manager for VIDTEX products. With compression ratios varying from 2:1 up to 8:1 of the original memory size, this space compression results in a time compression, so an image stored in the CompuServe system can be captured and downloaded rapidly.

Beyond the compressed format, "the other side is receivers—decoders and viewers in the micros—that can accept, digest a GIF file and appropriately display it on the screen," says Steve Wilhite, a principal software engineer who helped develop GIF. At this point, CompuServe has GIF decoders available for the Apple Macintosh, Commodore Amiga and IBM PC compatibles with CGA, EGA or VGA graphics capability, and Atari ST machines. And Wilhite says there will soon be decoders available for other models of micros. GIF-support software is available through appropriate CompuServe hardware forums. GIF images are also available in the Picture Support Forum. "We can have monochrome or color GIF files," says Wilhite. "Then it's a matter of the resolution your screen has." Images on GIF can be any resolution; they are not restricted by computer graphics hardware.

Images, stored and/or uploaded from a digitizer, can contain as many as 256 simultaneous colors from a pallet of 16 million, each of which is defined in terms of red, green and blue components. Although such massive color display capabilities should be available with VGA graphics capability on the new IBM models announced in April, many presently available systems will rely on the GIF decoder to translate the image into a lesser 32-color scheme. But vast improvements should be near. "Remember," says Wilhite, "that we had a graphics format code called RLE, which was black and white, low resolution and 256 by 192 pixels. Now that's a rather severe limitation. But when it was developed four or five years ago, personal computers used in the home didn't have high resolution." Now many of them demonstrate much finer resolution and GIF is the method to let these newer personal computers show their capabilities.

CompuServe is handling the GIF protocol in a unique way. Most important: the protocol is public-domain. "And we want it to be an industry standard," says Knouf. "We want to assist developers to create products quickly and with our assistance." So Knouf and Rob Vitolins, graphics product manager, have established very specific guidelines for developers. "At present we have more than 50 developers," says Vitolins. "Some are doing it strictly for an in-house need, including one government agency." Knouf adds, "To date, these developments have added an encoder and decoder for the Apple IIgs and improved decoders for the IBM PCs, Atari STs and Amigas." The technology will be broadly available so as to promote the intention of its universal use.

Although one long-term goal is real-time transfer of images, there are many uses for GIF beyond the hobbyist's curiosity of manipulating graphics. CompuServe subscribers can upload images converted from "paint" programs or other applications by using encoder programs or by first digitizing and then encoding. But GIF will also allow combinations of text and images to be scanned simultaneously, rather than being stored separately, and assembled at some later moment. This may have implications in archive and publishing projects.

Online, CompuServe plans to convert the art gallery of the Picture Support Forum, the Missing Children's Database files and the Weather areas to GIF, says Knouf. The technology also will be used in medical, radiographic and astronomical imaging. In fact, NASA wants to provide telescopic images online and let amateur astronomers use their microcomputers and creativity for image analysis. GIF has a sophistication that can be applied easily on such CAD/CAM workstations as the Apollo. And with GIF's speed, the idea of online slide shows now becomes feasible."

"GIF is still in the early stages of development," says Vitolins. Eventually there will be host-based software to generate the weather maps, stock charts and other synthesized forms of graphics. This real-time graphics should be available by the end of this year.

*—Yvonne Heather Burry*

## New PRODUCTS

### New Scott Adams Games Online

Control your destiny in the new *Sorcerer of Claymorgue Castle* game or manipulate Marvel Comics characters in the new *Spider-Man* and *The Fantastic Four* games.

In *Sorcerer of Claymorgue Castle,* players become Beanwick with a mission to recover the Stars of Power and store them in safety.

In *Spider-Man,* players may control the alter ego of Spider-Man as he encounters Electro, Sandman, Hydro-Man, Ringmaster, Doctor Octopus, the Lizard and Mysterio.

In *The Fantastic Four,* players control the Thing and the Human Torch as they encounter friends and enemies throughout their adventures. GO ADAMS

### GIF Files Collection in PICSIG

The Picture Support Forum has released a large collection of Graphics Interchange Format files that include robots, paintings by Rembrandt, cartoons and classics.

GIF allows for the universal exchange of high-resolution graphic images among incompatible microcomputers with decoders and encoders. Full support for Apple Macintosh, Commodore Amiga, IBM PC and compatibles with CGA, EGA or VGA graphics capability, and Atari ST machines and other utilities is available in the Picture Support Forum.

The Picture Support Forum offers 14 data libraries with more than 2,000 RLE and GIF graphics files. GO PICS

### Eaasy Sabre Without Surcharge

CompuServe subscribers can now access Eaasy Sabre, the travel reservation system from American Airlines, without an additional surcharge.

Eaasy Sabre provides accurate schedules for more than 650 airlines, information on more than 25 million airfares, and access to more than 13,000 hotels and 25 car rental agencies.

Subscribers may use Eaasy Sabre to find the fastest route to a destination, to check the weather report and AAdvantage travel awards, and to take advantage of the lowest airfares with the exclusive Bargain Finder feature. GO EZS

### MCS MIDI Forum Now Available

Musicians can telecommunicate music with the *Music, Computers and Software* MIDI Forum now available on CompuServe.

MIDI (Musical Instrument Digital Interface) is a process that allows musical instruments to communicate with special equipment. The MIDI Forum also offers sound banks and sound patches that can be downloaded.

The MIDI Forum caters to all levels of proficiency, and new members are encouraged to participate. GO MIDI

### EMI Aerocorp Prices Change

EMI Aerocorp Inc. announces a new price structure for its flight planning and enroute briefing services.

The minimum surcharge for each Aeronav, Aerovor or Aeroroute flight plan is now $2.50. The surcharge rate remains at $0.013 per nautical mile. The maximum per plan remains at $6.

The surcharge for Aerobrief, the enroute briefing alone, remains at $0.004 per nautical mile with a maximum of $2 per briefing. Your account will now be surcharged a minimum of $0.50 per briefing.

This pricing change will result in little rise in the total surcharges paid by the typical pilot because it affects only the minimum charges. GO EMI

### ADVANCE Adds New Products

American Express ADVANCE has added new products and services including a variety of vacation packages and a free copy of the 1986 American Express Annual Report, which may be ordered online.

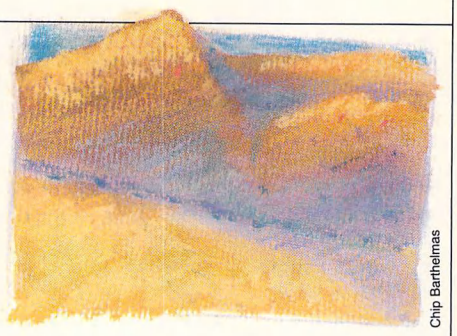
American Express and IDS Financial Services Inc. present "The New Tax Law and You, Part 2," the second installment in a six-part series about how the new tax law affects financial planning.

New items in the American Express Merchandise Shop include Charleston watches, the Minolta deluxe camera outfit, the deluxe GE VHS-C camcorder outfit and the Spectrum 2 radar detector. GO AXP

### *Island of Kesmai* Adds Leng

CompuServe and Kesmai Corp. announce the addition of the dry, mountainous region of Leng to the *Island of Kesmai.*

Leng, one of the eight continents in the world of Kesmai, features many challenges including new monsters and outdoor terrain such as cliffs and hidden valleys.



Chip Barthelmas

To reach Leng, you must visit the *Island of Kesmai*, build your character, travel on the island until you reach Stonehenge and then chant the spell found on the altar there. GO ISLAND

### AEJMC Forum Has New Data Library

The Association for Education in Journalism and Mass Communications that addresses Associated Press style, public relations, advertising and newspaper management.

The new Data Library 15 lists and reviews journalism education software written for computer-based education in journalism and mass communications.

Dr. William R. Oates, director of the K&B Clearinghouse for computer-based education, will regularly submit his textfiles about software issues in journalism education. GO AEJMC

### Acupuncture Info in Health Forum

A new service for professional acupuncturists, acupuncture students and interested laypeople is available in the Health Forum.

The purpose of this service is to increase communications about American acupuncture traditions, the changing legal environment and the issue of malpractice insurance.

The Health Forum is designed to allow health professionals and health-conscious subscribers to exchange information. The data libraries also include topics on substance abuse, general reading and eye care. GO HCM-660

### *YGI!* Offers New Option

*You Guessed It!* players can now access the Multi-Player Games Forum's *YGI!* Data Library directly by selecting option 10 from the Studio Lobby Signboard or by using a /MPGAMES command.

*You Guessed It!* is a real-time, multiplayer game show simulation in which players form teams and answer general information and trivia questions among themselves and a cast of online personalities. GO YGI

# Hamming It Up

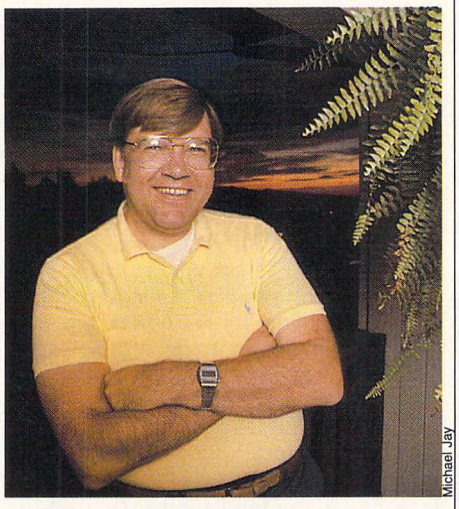
***Ham Radio Hobbyists Use Online Forum as Communications Channel***

When the aircraft Voyager completed its historic nonstop around-the-world flight in December 1986, shortwave radio enthusiast Michael Schwartz listened in on communications between the pilots and Edwards Air Force Base. "The trick was to get the right frequencies," recalls Schwartz. "Then it suddenly occurred to me to try CompuServe's Hamnet Forum. I logged on and within minutes had all the frequencies reserved for the Voyager mission. I was able to hear the crew and mission control as the craft approached the coast of South America. You can imagine how exciting it was to 'participate' in this aviation event."

Hamnet, a forum dedicated to amateur radio and related subjects, "strives to reach all levels of amateur radio enthusiasts, from people who are starting out to those experimenting with advanced techniques," according to forum administrator Scott Loftesness. Operational since 1981, Hamnet is one of CompuServe's oldest forums, but like ham radio, has greatly expanded its scope through the years.

"With advances in technology, we can not only link up with satellites but can use computers to enhance and improve communications," says Loftesness. Hamnet can open a new world to both computer and ham radio users. "Because of liberalized FCC regulations, the novice (first-level) ham radio license now allows voice-to-voice communications. Before, only Morse code was permitted," says Loftesness. Thus, even beginners can immediately enjoy full benefits of amateur radio communications.

Hamnet also helps point the way through the often confusing jungle of varied interests, through *Hamnet Online* magazine. This database offers feature articles, news and newsletters, product information and reviews, education/tutorials, and a list of local and national contacts and clubs. Menus are designed for users to find what they need quickly. For example, an entire section explains the basics of amateur radio and shortwave listening, including what "hams" (radio operators) do, how to obtain the various levels of licenses, and practical applications and technology. Areas of interest such as communication with the AMSAT OSCAR 10 satellite in space; SWL international broadcasting; and long distance listening can be found here. Packet radio, computer-to-computer communication via amateur radio, is also covered extensively. "We have users from Canada, Germany, Switzerland, the United Kingdom and Ireland," says Loftesness. "They can use specialized




**Talking up Hamnet:** *Loftesness*

frequencies provided by the magazine and the forum to communicate anywhere." SWLs can monitor military broadcasts and ship-to-shore conversations, along with receiving confirmation cards from stations they've contacted. Users can also make contact with the Great Beyond. "Last fall, Japanese hams launched an amateur satellite," says Loftesness. "They are putting up a bulletin board so we can have a radio link and upload messages when the satellite passes overhead."

Newsletters put various groups in touch with each other to allow for the dissemination of information. The member of one such group was instrumental in stopping "jammers"—radio operators who illegally interfere with and disrupt broadcasts.

Product reviews assess pros and cons of equipment and are particularly valuable, considering the technical nature of the application. A calendar for contests, events and FCC examinations is in the works; subscribers are directed to local ham clubs and classes in their area. A support group for handicapped hams (Handi-Ham) matches students with helpers, provides instruction and loans equipment. *Hamnet Online* also introduces users to the American Radio Relay League. Open to anyone interested in amateur radio, this noncommercial association establishes networks for communication in the event of disasters and other emergencies, and strives to represent ham radio operators in legislative matters, among other things.

"The Hamnet Forum environment lends itself especially well to amateur radio," says Loftesness. "Not only can users get the latest information on international and satellite broadcasting, but they can swap valuable information about experiments." One subscriber, for example, had difficulties in learning Morse Code by conventional methods. He used programs from the data libraries to complete his training and passed his novice test.

Data libraries also cover regulations, ham radio-related software and programming, "homebrewing" (building equipment from scratch), equipment exchange and files on specialized subjects. Of interest to SWL aficionados is Data Library 3—the weekly updates by George Wood of Radio Sweden International in Stockholm.

In addition to being fascinating, the hobby can also help others. "Ham radio operators are invaluable in a disaster, providing a vital link to the outside world when all else has failed," says Loftesness. For example, amateurs passed messages back and forth during the Mt. St. Helens and Mexican earthquake disasters. They can also supply "phone patches" to service people overseas for the cost of a local phone call.

With the five levels of courses offered, "you can put as much or as little into ham radio as you wish," says Loftesness. But with the combination of computer and radio technology, you can practically "go" anywhere from your modem. To get started, type GO HAMNET.

*—Sandra Gurvis*

## Talk to Us

*Online Today Electronic Edition* has a Feedback area for letters to the editor. Simply type GO OLT-33 from any prompt in the CompuServe Information Service.

ONLINE TODAY

## Ask Customer Service

**Q: Does CompuServe have a service that offers information on automobiles?**

**A:** Yes. In the New Car Showroom you can view and compare prices and features for cars, vans and trucks. A loan amortization feature is also available to help you keep track of monthly payments. To access the New Car Showroom, type GO ATO at any prompt.

**Q: How can I obtain information on Federal Government services?**

**A:** The Information USA section covers such areas as "Gifts from Uncle Sam," "Help from Your Congressman," "Your Rights and Benefits," and "Help for You and Your Family." Help for your family is available in such areas as genealogy, immigration/citizenship information, health matters, careers/education and banking/credit/finance. To access Information USA, type GO INFOUSA at any prompt.

**Q: Does CompuServe offer interactive health services?**

**A:** The Human Sexuality Forum has an area for people to exchange ideas, ask questions, and access up-to-date medical information.

The Human Sexuality Forum is managed by Howard and Martha Lewis, editors of the journal *Sexuality and Disability*. Their articles on health and sexuality have appeared in *Reader's Digest*, *Good Housekeeping*, *Families*, *Consumer Reports* and *Family Circle*.

The Human Sexuality Forum also allows access to a wide range of health professionals. To reach the Human Sexuality Forum, type GO HSX at any prompt.

**Q: What other health services are available?**

**A:** The Health Forum provides general health information, including discussions on diet, fitness, and emotional and family health. You can take an AIDS Quiz, visit the Childbirth Center or take part in the weekly trivia night. Type GO HCM at any prompt.

**Q: What type of recipes are available from CompuServe?**

**A:** You'll find recipes, cooking tips and wine hints in the Cooks' Forum. You can even try out your favorite celebrity's recipe. Just type GO COOKS ONLINE at any prompt.

**Q: I am a military veteran. Is there a place on CompuServe where I can keep up on veterans' issues?**

**A:** The Military Veterans Service (GO VET) includes a personal adjustment section available to veterans only.

**Q: Is it possible to get information online about selling photographs?**

**A:** Yes. CompuServe offers the Photo Forum. Type GO PHOTOFORUM at any prompt and choose option 4 for the data libraries, and then option 8 for the Marketing/Business Data Library. This will give you a resource listing of potential markets for your photographs.

*—Dan Flynn and Cindy Haller*

*These answers and more are available in Customer Service's Question & Answer Database. GO QUESTIONS*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GO OLI or circle 12 on the Reader Service Form.

## Gift of Time

*Online Today* offers subscribers the chance to write a 200-word essay on how they use CompuServe's Information Service.

Your essay should be typed double-spaced and sent to *Online Today,* CompuServe Incorporated, 5000 Arlington Centre Blvd., P.O. Box 20212, Columbus, OH 43220, or by an EasyPlex message to 70003,3246. Please include your full name, address and User ID number.

If we use your column, you will receive 10 hours of standard service connect time (a $60 value) and a byline.

### CompuServe Helps Businessman Digest Changing Information

In this harried age of high technology and lightning-speed communications, a small business owner must find an effective means to keep abreast of the ever-changing technical and financial environment. CompuServe is the tool I have found to help keep me on top of the information pile.

Because I am in the construction business, a daily check of the local weather forecast (GO WEA) helps me to plan my crews' activities for the next day. Stevens Business Reports (GO SBR) has introduced me to a newsletter full of useful information related to financial, legal, insurance and other issues facing the small businessperson today. The Associated Press (GO AP) keeps me informed of fast-breaking news that can affect my business and my personal life. When planning a trip, I always consult the Official Airline Guide Electronic Edition (GO OAG) to find the air fares and schedules that best fit my itinerary and pocketbook.

The list of uses I have found for CompuServe is growing with the continuous additions to CompuServe's index. CompuServe is a bargain in my book and a "must have" tool.

Jeff J. Irvin
Lakewood, Colo.

## Changing Your Password

The CompuServe Information Service urges its customers to change their passwords at least once a month.

The password should be a minimum of eight characters composed of two unrelated words separated by a symbol, for example: HOUSE*MAGNET.

To find out how to change your password, type GO PASSWORD.

## Investing at The Mall

If you're looking for investment opportunities and financial services, visit The Electronic Mall. Many merchants offer a variety of products and information online and will answer investment-related questions by EasyPlex.

Here's a look at a few Mall merchants that offer financial products and services. For a current listing of all Mall merchants, consult the online Mall directory by typing GO MALL.

FIRST TEXAS®

### First Texas Savings

Established in 1894, First Texas Savings is a leader among financial institutions in the Lone Star State. And Texas offers some of the highest investment interest rates in the nation.

First Texas invites CompuServe subscribers to visit its Mall branch and compare rates on a variety of financial products, including CDs, IRAs and Money Market deposit accounts. First Texas' tiered rate structure rewards you with even higher rates for larger investments on many products.

First Texas' banking experts, trained to make long-distance banking easy, are only a toll-free telephone call away.

To visit First Texas and compare rates or open an account today, type GO FT.

MaxUle& Company Inc.

### Max Ule & Co.

Max Ule, America's first online discount broker, offers subscribers a wide range of brokerage services and information online. Visit the Mall store for information on Max Ule's brokerage service and rates. Using online order entry, you can buy and sell stocks on the New York Stock Exchange, American Exchange and Over-the-Counter. You can also trade options, and buy and sell mutual funds, bonds and securities. Max Ule offers its CompuServe customers other time- and money-saving services, including Tickerscreen and BAWD. For details, and to open your new online account, type GO MU.

*A member of the Sears Financial Network*
DEAN WITTER

### Dean Witter Reynolds

Dean Witter Reynolds, a leading financial service provider, offers CompuServe subscribers a variety of investment and money management services.

Dean Witter can explain the most effective methods for accumulating funds for retirement, family education, tax savings and other financial goals. Visit Dean Witter's Mall branch and you'll discover fast, interactive programs such as Planning for a College Education, a program that provides you with estimated costs for your child's education and investment ideas that can help you meet those costs.

You also can request free brochures on financial products, including IRAs, zero coupon bonds, mutual funds, tax-deferred annuities and more. If you invest in the market, or have been thinking about it, request Dean Witter's free Recommended List of Stocks, which has consistently outperformed the leading averages since 1978.

Finally, Dean Witter welcomes questions on any aspect of investment management or financial planning through the Open Line for Your Questions service. A Dean Witter account executive will reply promptly and there is no obligation.

To discover how Dean Witter Reynolds can help you meet your financial goals, type GO DWR.

H&R BLOCK®

### H&R Block

H&R Block Inc., founded more than 30 years ago by Henry and Richard Bloch, now prepares about 10 percent of all individual income tax returns filed in the United States each year—about 9.2 million in 1986. CompuServe subscribers are invited to visit H&R Block's Mall branch for information on how they can receive a free tax reform booklet and free tax recordkeeping books. Also featured online is information on H&R Block's Income Tax Preparation Courses. Subscribers can request free information about the course online.

To visit H&R Block at The Mall, type GO HRB.

# UPDATE

### Investment Software

Investment Software specializes in financial software for the IBM PC and services for the individual and the professional. A limited selection of investment packages for the Macintosh is also available online. All products featured in the online catalog are fully backed by vendor support.

Browse the selection of products in such categories as Technical Analysis, Portfolio Management, Options, Bonds, Commodities, and Real Estate/Taxes. Especially recommended is a new portfolio management package from ECON that has been praised by *Forbes*, *USA Today*, *Business Week* and other publications. Professional stockbrokers will find a selection of programs including Spectrum and Visible Asset. Armchair investors can enjoy games and simulations such as *Wall St.: The Stock Market Game*, *Wizard of Wall Street* and *Millionaire*.

To explore Investment Software's online catalog, type GO IS.

## APPAREL/ACCESSORIES

| | |
|---|---|
| APC | Apparel Concepts for Men |
| BR | Brooks Brothers |
| GD | The Gold Connection |
| IO | Inside * Outside |
| MJ | Milkins Jewelers |

## AUTO

| | |
|---|---|
| AV | AutoVision |
| BU | Buick Magazine |
| CHV | Chevy Showroom |
| DU | Dutchess CompuLease |
| FMC | Ford Motor Co. |

## BOOKS/PERIODICALS

| | |
|---|---|
| BAL | Ballantine Books |
| DJ | Dow Jones & Co. |
| MH | The McGraw-Hill Book Co. |
| MER | Mercury House |
| BK | Small Computer Book Club |
| WB | Waldenbooks |

## COMPUTING

| | |
|---|---|
| ATN | Aaxion Tech Network |
| CD | Computer Discount Warehouse |
| CDA | Computer Sales |
| CE | Computer Express |
| GL | Great Lakes Business Forms |
| HTH | The Heath Co. |
| IBM | IBM Canada Ltd. |
| IS | Investment Software |
| MM | Marymac Industries Inc. |
| MNU | Menu International |
| NT | Nitro Micro |
| SAF | Safeware |
| SDA | Software Discounters of America |

## FINANCIAL

| | |
|---|---|
| BSW | Bowers, Schumann & Welch |
| INC | Business Incorporating Guide |
| FT | First Texas Savings |
| HRB | H&R Block |
| MU | Max Ule Discount Brokerage |

## GIFTS/NOVELTIES

| | |
|---|---|
| AK | Alaska Teleshopper |
| BG | BannerGram by Mail |
| HI | Hawaiian Isle |
| JE | J.E. Smith Brassware |
| LM | Lincoln Manor Baskets |
| TF | Tooth Fairyland |

## GOURMET/FLOWERS

| | |
|---|---|
| COF | Coffee Emporium |
| FTH | Fifth Avenue Shopper |
| FFS | Florida Fruit Shippers |
| PF | Pepperidge Farm |
| SIM | Simon David |
| WK | Walter Knoll Florist |

## HEALTH/BEAUTY

| | |
|---|---|
| BS | B&K Beauty Supplies |
| GN | General Nutrition Corp. |
| MN | Merle Norman Cosmetics |

## HOBBIES/TOYS

| | |
|---|---|
| DD | Don's Dollhouse & Miniatures |
| HC | Hobby Center Toys |
| DO | The Doll Place |
| TSR | TSR Hobby Shop |

## MERCHANDISE/ELECTRONICS

| | |
|---|---|
| ATT | AT&T |
| BD | Black & Decker Powerline Network |
| ORD | CompuServe Store |
| CFD | Crutchfield |
| GC | Garden Camera & Electronics |
| SV | Stereo/Video Factory |

## MUSIC/MOVIES

| | |
|---|---|
| BMG | BMG Direct Marketing, Inc. |
| EMC | Express Music |
| MV | Magic Castle Video |
| MAO | Music Alley Online |

## OFFICE SUPPLIES

| | |
|---|---|
| EX | Executive Stamper |
| OM | Office Machines & Supplies |
| SC | Stationery Center |

## ONLINE SERVICES

| | |
|---|---|
| EF | EF Hutton |
| NN | NewsNet |
| OA | Official Airline Guides, Inc. |

## PREMIUM MERCHANTS

| | |
|---|---|
| AXM | American Express Merchandise |
| MMA | Metropolitan Museum of Art |

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## Move-It

***For All-Purpose Communications***

Woolf Software Systems
22048 Sherman Way, #106
Canoga Park, CA 91303
818/703-8112

**Computers:** IBM PC, PC-XT, PC-AT and compatibles; versions available for CP/M and CP/M-86 based computers.
**Operating System:** PC-DOS or MS-DOS 2.0 or later; versions available for CP/M, CP/M-86 and Concurrent DOS.
**Media:** Supplied on one double-sided diskette requiring at least one diskette drive.
**Copy Protection:** None.
**Required Peripherals:** None.
**Other Requirements:** Modem needed to use all features.
**Optional Items:** Computer-to-computer RS-232C cable for hardwired communications.
**Systems Used for Test:** (1) 704K Heathkit PC-150 computer with high-resolution color monitor, two double-sided diskette drives, two 20MB hard disks, Prometheus ProModem 1200 and V-20 processor; running MS-DOS 2.13. (2) 640K Tandy 1000 with Tandy CM-2 color monitor and two double-sided diskette drives; running MS-DOS 2.11.
**List Price:** $150

*Reviewed by Hardin Brothers*

I feel almost nostalgic using Move-It, as if I've returned to the early days of CP/M. Its documentation is uneven and its user interface feels old-fashioned. Yet underneath is a program I enjoy.

Move-It (version 4.02) can be used for both modem communications and hardwired file transfers between computers. The program is delivered unconfigured, leaving the job of final installation to the user.

A configuration program leads through a series of menus, asking forz information about your computer, its speed, the serial port (only COM1 and COM2 are supported) and the type of modem being used, if any. Menus described in the manual are different from those that appear on the screen, so installation becomes an exercise in educated guessing.

The installation program next asks you to identify each drive available on your system and designate whether to enable that drive for local access, remote access or both. Then it goes through a series of commands, asking which you want to enable for use from a remote system. After asking for a default baud rate, the program finally presents a table of all options chosen, including the access settings for 26 disk drives.

One problem I've found is that once Move-It's configuration program is run, it's impossible to change disk access levels or the assigned serial port from within the regular program. To switch from using a modem to a direct connection between computers, for example, or to change access permission for a disk drive, one must rerun the entire configuration program.

After the program is installed, it operates in one of three modes. If Move-It is used to connect two local computers without a modem, the command mode lets one computer send and retrieve files from the other; look at a directory on either computer (if drive access levels are correctly set); and type, rename or erase files on either computer. There are commands to change the directory for both the local and remote computer, but I couldn't get those to work. At one point, an attempt to change the local directory setting caused Move-It to ask for permission to erase all files in the current path.

In talk mode, Move-It becomes a satisfactory terminal program for use with services such as CompuServe or local bulletin boards. The talk mode includes a capture buffer of up to 55K, XON/XOFF flow control and the ability to echo received information to a printer. It takes just two keystrokes to return to command mode to transfer files.

File transfers between two computers running Move-It can use either a proprietary protocol or XMODEM protocol for error checking and correction. Of course, XMODEM also handles file transfers to and from remote systems not running Move-it. Although not discussed in the manual, the version of XMODEM included in Move-It must be "relaxed," meaning it adapts successfully (without timeout errors) to the inevitable delays that occur when downloading from CompuServe or other busy multi-user services.

Move-It lets a user build a file of up to 16 macro commands and assign those commands to any alphabetic or function keys. More impressive is its scripting ability, which allows relatively complex communications sessions to be run automatically. A script can use any normal Move-It commands plus two dozen special scripting words that control execution time, looping, subroutines and matching received strings.

Move-It's scripting language is sufficient for many purposes but doesn't allow the use of variables. By using wild cards for filenames, it is possible to transfer files in a batch mode between two computers running Move-It, but it is difficult to use for uploading or downloading groups of files from CompuServe or a bulletin board service.

I had little trouble using Move-It either for CompuServe communications and file transfers at 1200 baud or for transferring files between two IBM-compatible computers at up to 19,200 baud. Not all features worked according to the descriptions in the Move-It manual, but I managed to transfer files using both XMODEM and Move-It protocols without problems.

Move-It handled all the error situations I could devise for it without any problems. Only when I set two computers at different baud rates did I manage to lock up both computers. More often, Move-It responded by simply waiting a while and then reporting a communication error when I did things such as turning off one computer during a file transfer.

Move-It is a useful program for those with some experience using older style communication programs. But given its inconsistent documentation, Move-It probably would intimidate many unsophisticated or inexperienced computer users.

*Hardin Brothers is an associate editor of* 80 Micro *and a frequent contributor to several other magazines. He is also forum administrator of CompuServe's Writers' and Editors' Special Interest Group (GO WESIG).*

Trademarks: CP/M, CP/M-86, and Concurrent DOS (Digital Research Inc.); Heathkit (Heath Co.); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); Move-It (Woolf Software Systems Inc.); MS-DOS (Microsoft Corp.); ProModem (Prometheus Products Inc.); Tandy 1000 (Tandy Corp.).

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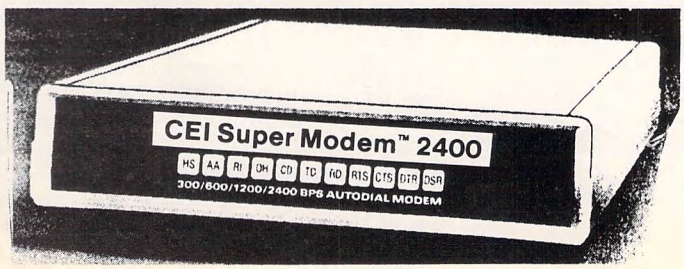


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# Windows inTalk

***Windows' Own Terminal Program***

Palantir Software
12777 Jones Rd., #100
Houston, TX 77070
713/955-8880 or 800/368-3797

**Computers:** IBM PC, PC-XT, PC-AT and compatibles.
**Operating Systems:** PC-DOS or MS-DOS version 2.0 or higher.
**Media:** Requires two double-sided diskette drives or a diskette drive and a hard disk.
**Copy Protection:** None.
**Required Peripherals:** Color or monochrome monitor with IBM CGA, IBM EGA, Hercules Graphics Card or equivalent video adapter; "intelligent" modem (Hayes-compatible modem recommended).
**Other Requirements:** Minimum 512K RAM; Microsoft Windows operating environment (runtime Windows environment is provided).
**Optional Items:** Pointing device (runtime Windows supports Microsoft, Mouse Systems, VisiOn, Logitech and equivalent mice, Kraft joystick and Lite-Pen Co. or FTG Data Systems light pens); printer (runtime Windows supports 17 printers and two Hewlett-Packard plotters).
**System used for test:** 1,024K Proteus 286GT computer with 360K diskette drive, 1.2MB diskette drive, 20MB hard disk, two 15MB Sysgen DuraPak removable Winchester drives, STB Systems 2.5MB Grande Byte extended memory card, Amdek Color 722 EGA monitor, STB Systems 256K EGA Plus video adapter, Torrington Manager Mouse, Epson FX-85 printer and USRobotics Courier 2400 modem; running IBM PC-DOS 3.10.
**List Price:** $195

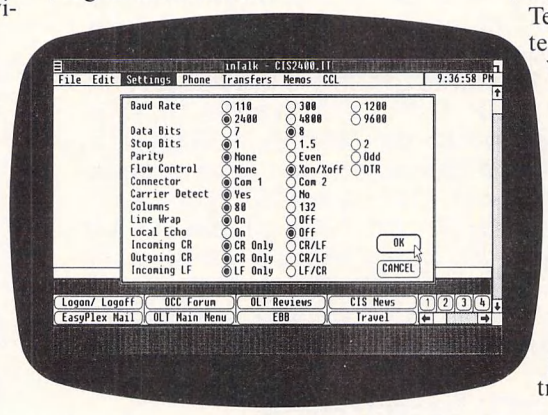
*Reviewed by Ernest E. Mau*

Although Microsoft Windows includes only crude communication abilities, Windows inTalk (version 1.10) provides terminal emulations, error-checking protocols, a special command language and other niceties.

Windows inTalk is intended specifically for the Windows operating environment, and a three-diskette Windows "runtime" environment (version 1.01) is provided for users who don't have the full Windows system. However, runtime Windows imposes a half megabyte of disk overhead without providing goodies such as word processing, graphics, notepad or clipboard functions. That limits functionality in the runtime environment by excluding inTalk's ability to copy or cut and paste information through Windows' clipboard for exchange with other modules.

Software installation is straightforward for either Windows environment. However, the manual (except the jacket) invariably calls the program inTouch instead of inTalk. Even the runtime setup directs users to run the nonexistent inTouch program.

Unlike many programs, inTalk doesn't rely on modem response codes. Normal operation with automatic logons, log-offs and other functions needs a functional Data Carrier Detect handshaking signal from the modem. Fail to provide the signal, and some inTalk operations malfunction. However, a future inTalk release will allow the signal to be left off.




**Terminal emulations:** *Windows inTalk*

Owing to a limitation in Windows itself, inTalk supports only COM1 or COM2 serial ports for modems. Lack of COM3 or COM4 could pose problems if serial devices such as mice and pen plotters also must use COM1 and COM2.

Once inTalk is working, it has some good features, including full control over communications parameters, ASCII and binary transfer methods.

A rudimentary memo editor permits offline text preparation.

Windows inTalk also provides programmable on-screen "function keys" arranged in four menu levels of eight keys each. Clicking key boxes issues commands to remote systems, activates complex scripts and can automate large portions of communications tasks. Of two sample setups provided, MCI Mail's is particularly effective, using function keys to do just about anything. However, the CompuServe sample was too generalized, and I had to rewrite it almost completely, keeping only EasyPlex sample functions intact.

The Communications Command Language is effective and has numerous useful commands. CCL scripts loaded individually or executed via inTalk function keys give a surprisingly versatile range of automation methods. The language is easy to learn and apply. I needed just 15 minutes with the manual and sample files before writing my own scripts.

Notably, inTalk scripts can violate password security provisions. Unless a logon script specifically contains a "no show" command, script execution displays each line in a special screen area, including lines containing passwords. Casual onlookers could lift a password easily if a user forgets to turn off script display.

Windows inTalk provides TTY, ADDS Viewpoint, Beehive, IBM, Televideo, VT-100, VT-52 and VIDTEX terminal emulations. However, its VIDTEX emulation is not equivalent to CompuServe's own VIDTEX-based programs and merely accommodates receiving and displaying CompuServe "RLE" graphics like weather maps, although they're badly distorted by horizontal stretching. While it can display RLE image files from CompuServe data libraries, it cannot prepare such files for uploading and doesn't provide A protocol or B protocol file transfers.

VIDTEX emulation receives only glancing documentation. A user isn't told that function-key menus must be zoomed to the bottom of the screen or removed to prevent fracturing graphics. A CompuServe warning about terminal incompatibility when "typing" an RLE file from a data library isn't mentioned, although telling CompuServe to go ahead displays the picture successfully.

Nothing advises that RLE files may be downloaded via XMODEM, saved to disk and then displayed later using "view text file" from the "transfer" menu. And nothing describes using "copy bitmap" from the "edit" menu to move an image to the Windows Clipboard and then to a module such as Windows Paint. Yet these operations all work.

Only three error-checking protocols are provided: XMODEM, Crosstalk and inTalk-to-inTalk. The "relaxed" XMODEM handles CompuServe uploading and downloading adequately even during busy periods. While inTalk

calls all protocols binary transfers, they're usable for more than binary files. That could confuse new users faced with ASCII versus binary CompuServe choices for XMODEM transfers, but picking CompuServe's ASCII option works fine for moving text through XMODEM.

Windows inTalk generally lives up to Palantir's claims and is far better than Windows' own terminal program. But it is less impressive as a stand-alone program under runtime Windows, where everything it does can be duplicated or bettered elsewhere, often at a lower cost.

*Ernest E. Mau, a full-time, free-lance writer and* Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

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## TeleWriter II

***Combines Word Processing with Communications***

R&S Micro Services
2500 39th Ave. N.E.
Minneapolis, MN 55421
612/781-1899

**Computers:** IBM PC, PC- XT, PC-AT and compatibles.
**Operating Systems:** PC-DOS and MS-DOS version 2.0 or higher.
**Media:** Requires one diskette drive.
**Copy Protection:** None.
**Required Peripherals:** Modem.
**Other Requirements:** Minimum 192K RAM.
**Optional Items:** Hard disk.
**System used for test:** 640K IBM PC with one 20MB hard disk, one 360K diskette drive, USRobotics Courier 2400 modem and Epson FX-80+ printer; running PC-DOS 2.1.
**List Price:** $129

*Reviewed by James Moran*

TeleWriter II (version 1.10) blends word processing and communications. The word processing function can be used for itself or can be used to edit "live" data from a communications link while online. Although neither feature is as complete as it could be, the combination functions well.

Installation begins by copying the distribution diskette. Hard-disk users will want to copy files to a subdirectory, while diskette users need only make a working copy that also contains DOS system files.

When TeleWriter II is first started, it is necessary to activate a setup mode, and this is where some users may quickly become confused. Two setups actually are required: one for the computer system and one for communications scripts and parameters.

Much of the setup menu is devoted to printer parameters, and that section is among the most confusing. When defining a printer, most options seem to be added by pressing the Return key when the correct parameter is presented on the screen. However, actually choosing the printer this way causes the display to roll to the next manufacturer. Users who automatically go to the next display may be dismayed to find that their printers don't work properly. Most eventually discover where they went wrong, but the selection method is disconcerting at best.

Also, explanations for setting printer formfeeds and linefeeds should be expanded. The days when only hackers and power users had to install software are gone. A casual user should need to know nothing more technical than how to turn on the equipment. To be fair, users who take the defaults will find that they work for most printers.

One other annoyance in the setup procedure is that no provision has been made for a second printer in the system. Users who have both daisywheel and dot-matrix printers may have to reconfigure their system each time they change printers. Considering the developer's claim that TeleWriter II is a word processor and a telecommunications package, direct support for a second printer should be added.

The word processing function is fairly comprehensive. It does much of what is expected of an inexpensive word processor and has few idiosyncrasies. Scrolling is quick, cursor movement is comprehensive (next line, paragraph, page), and a split-screen capability even allows editing two documents at once. Minor annoyances are that the Delete, PgUp and PgDn keys aren't operational, but the program has defined function keys for most such operations.

Communications with TeleWriter II function smoothly, but the script facility could use some improvement. The system is limited to 20 script files, and each file is limited to 12 command lines. The latter limitation can be overcome by linking files, but each linked file is counted against the 20-file limit. Also, no real control of logic flow has been provided by the available scripting commands, so transfer of control to different lines within a script is hampered. However, users of information services such as CompuServe will find a variety of precoded and tested script files for their use.

Transmission speeds can range from 110 to 9600 baud, and facilities are provided for data transfer of files with error-checking protocol. Surprisingly, the "relaxed mode" version of XMODEM that this product incorporates didn't seem to make any difference in the accuracy or performance of XMODEM transfers compared with other products. None of the newer protocols (Kermit, YMODEM, etc.) are included, so TeleWriter applications will be limited primarily to IBM PC users.

TeleWriter II does have some flaws. The screen blanking capability that clears the screen after no keyboard activity is detected in a 10-minute period did not work. Also, the software is sensitive to unrelated software running in other areas of the computer. It locked up my computer four times before I finally decided to disable my popups and multi-partition manager. If you have any co-resident software, even if it's normally well behaved, you might want to think twice about installing TeleWriter II.

However, if you're running a plain-vanilla system, and you need word processing integrated with your communications software, TeleWriter II may be a useful addition to your software library.

*James Moran is vice president of Programming Service Corp., a Midwestern consulting and research firm. His CompuServe User ID number is 70007,2253.*

Trademarks: CompuServe (CompuServe Incorporated); Courier 2400 (USRobotics Inc.); Epson FX-80 (Epson America Inc.); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Corp.); TeleWriter (The Bristol Software Factory. Ltd.).

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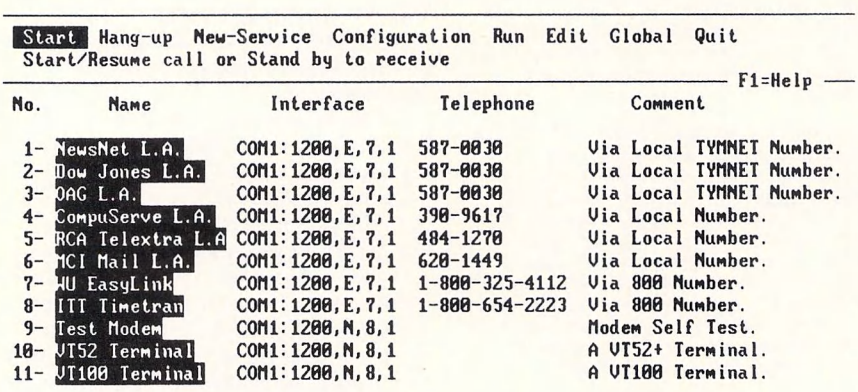
Start Hang-up New-Service Configuration Run Edit Global Quit
Start/Resume call or Stand by to receive
F1=Help
No. Name Interface Telephone Comment
1- NewsNet L.A. COM1:1200,E,7,1 587-0030 Via Local TYMNET Number.
2- Dow Jones L.A. COM1:1200,E,7,1 587-0030 Via Local TYMNET Number.
3- OAG L.A. COM1:1200,E,7,1 587-0030 Via Local TYMNET Number.
4- CompuServe L.A. COM1:1200,E,7,1 390-9617 Via Local Number.
5- RCA Telextra L.A COM1:1200,E,7,1 484-1270 Via Local Number.
6- MCI Mail L.A. COM1:1200,E,7,1 620-1449 Via Local Number.
7- WU EasyLink COM1:1200,E,7,1 1-800-325-4112 Via 800 Number.
8- ITT Timetran COM1:1200,E,7,1 1-800-654-2223 Via 800 Number.
9- Test Modem COM1:1200,N,8,1 Modem Self Test.
10- VT52 Terminal COM1:1200,N,8,1 A VT52+ Terminal.
11- VT100 Terminal COM1:1200,N,8,1 A VT100 Terminal.

**Cost-effective communication:** *Connect*

# Connect

***Provides Cost-Effective Telecommunications***

Micro Computer Trends
8421 Wilshire Blvd., #202
Beverly Hills, CA 90211
213/653-4331

**Computers:** IBM PC, PC-XT, PC-AT and compatibles.
**Operating Systems:** PC-DOS or MS-DOS version 2.0 or higher.
**Media:** Requires two diskette drives or one diskette drive and a hard disk.
**Copy Protection:** None.
**Required Peripherals:** Modem (Hayes-compatible recommended).
**Other Requirements:** Minimum 256K RAM.
**Optional Items:** Printer.
**System used for test:** 640K IBM PC-XT with two diskette drives, one Maynard 20MB hard disk, Hercules Graphics Card Plus video adapter, Okidata Microline 84 printer and Hayes Smartmodem; running PC-DOS 2.1.
**List Price:** $49.95

*Reviewed by William J. Lynott*

Do you need elaborate, unattended log-on/log-off procedures for communications? If so, you'll probably need state-of-the-art software. If your requirements are more basic, however, you should make out just fine with a lower priced communications program such as Connect.

This isn't suggesting that Connect (version 2.10D) isn't loaded with features. Its features would have made a typical online communicator of just a few years ago drool with envy. Thus, Connect is a good indicator of just how sophisticated inexpensive software can be.

Among Connect's many features are context-sensitive help screens, easily changed program defaults, terminal emulation and the most popular transmission protocols with error-checking routines. Connect also lets you access DOS routines without leaving the program or breaking communications. Until recently, this feature was limited to the most expensive and elaborate programs.

Connect will store passwords and predefined communications parameters for various online services. It also provides automatic log-on procedures, though they are limited to relatively basic routines.

Connect's authors have made the program almost entirely menu driven, so it is easy to use. I believe that even a beginner could hook up to an online service such as CompuServe after 10 or 15 minutes with Connect's user manual. Of course, more complex procedures such as sending or transmitting files would require more time and practice.

Ease of use usually comes at a price, and Connect is no exception. Some procedures that could be done in a flash with a command-driven structure are somewhat cumbersome using Connect's menus. But this shouldn't bother anyone who hasn't used a command-driven program.

Making a call with Connect is simple. If you have stored the phone number and communications parameters, just type the name or directory number of the desired service. Connect does the rest. Of course, you can bypass automatic procedures and manually type phone numbers, passwords and the like as you see prompts appear on the screen.

Connect makes good use of all special function keys plus several Alt-key combinations. To transmit a file, tap [ALT-X]. You'll be asked to pick a transmission protocol from 10 choices displayed on the screen. Then you'll be asked to identify the name and location of the file you wish to upload (transmit). During the actual transfer, the file you're sending won't be displayed on the screen. Although the display keeps you well informed about what is happening, I prefer being able to watch text as a file is sent. Incidentally, Connect can transmit both text and binary files at selectable rates up to 9600 baud.

One feature unusual among similarly priced programs is the ability to change communications parameters while online. Just press the F4 key to access the menu, move around the menu system and issue any command to change the current parameters.

Receiving a file is just as easy and uses the [ALT-R] key combination. As in transmission, the screen display keeps you informed about such things as the time the receiving routine began, the protocol being used, the filename and the number of bytes transferred. Any downloaded (received) information can be output to a printer or captured in a disk file.

With the proper modem, Connect will support the standby mode for unattended answering of incoming calls.

Some host computers require that you access them using a specific type of computer terminal. Connect handles most of these requirements through an emulation capability that makes your computer look like a suitable terminal to the host system. Among others, it can emulate the DEC VT100, DEC VT52, IBM 3101 and Hazeltine 1552.

The user manual doesn't do justice to the program. The text is printed in small type on pages with narrow margins. The resulting crowded effect isn't comfortable to read. The 68-page booklet would be improved greatly by a larger typeface, wider margins and a few more illustrations of screen displays.

In summary, Connect is a good program. It offers all the features I need for my online communications, and the price is right. Come to think of it, what else is there?

*William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.*

Trademarks: CompuServe (CompuServe Incorporated); Connect (Micro Computer Trends); DEC (Digital Equipment Corp.); Hercules Graphics Card Plus (Hercules Computer Technology Inc.); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Corp.); Okidata Microline (Okidata Div. of Oki America Inc.).

GO OLI or circle 19 on the Reader Service Form.

## Visualizer IIe

***Yields Business Graphics for Apples***

PBI Software
1163 Triton Dr.
Foster City, CA 94404
415/349-8765

**Computers:** Apple IIe or IIc; version also available for Apple IIGS.
**Operating System:** ProDOS.
**Media:** Supplied on single 5.25-inch diskette requiring one standard diskette drive.
**Copy Protection:** None.
**Required Peripherals:** Color or monochrome monitor.
**Other Requirements:** 64K 80-column RAM card.
**Optional Items:** AppleWorks software; color monitor for color graphics; printer (more than 50 printers and interface cards supported); color graphics printable with ImageWriter II color printer.
**System used for test:** Apple IIe with Apple color monitor and Epson FX-85 printer.
**List Price:** $89.95

*Reviewed by Brian D. Monahan*

Visualizer IIe is a business-graphics package designed specifically with the AppleWorks user in mind. The program can directly access AppleWorks spreadsheets to produce various graphs. It employs virtual memory, so it can read any size AppleWorks spreadsheet file and load it into Visualizer's own facilities. Data also can be entered directly through the program's internal "datasheet" facility.

Visualizer can produce several graph types, including pie, line, point, scatter, bar and three-dimensional bar graphs. All are displayed using the Apple's double high-resolution mode. The displayed pictures are clear and concise.

Graphs can be displayed in color on a color monitor. They also can be printed in color with Apple's ImageWriter II color printer. Titles and other text can be placed in graphs using selections from four text sizes and two fonts provided with the program.

Graphing data ranges is the operation for which graphing packages are used most often. A data range simply is a list of numbers. For example, the sales made by five salespeople during the first quarter of a year might represent one data range. Their sales for the second quarter might represent another, and so on.

Identifying ranges with Visualizer is easy. Move to the top of the range, press the A key to indicate that a range is being defined, move down by pressing the Arrow key, and press the Return key to end the range designation. Ranges are highlighted as they are defined.

Often a user wants or needs to view a graph many times before printing it. Doing so is easy with Visualizer. Once a range has been defined, the graph of that range can be viewed by pressing the G key.

Printing graphs is also easy. Simply press [OPEN APPLE-P]. Graphs may be printed as they appear on the screen, or they may be rotated 90 degrees.

Graphs created with Visualizer can include up to six data ranges (the same number as Lotus 1-2-3). So line charts may include up to six lines, and each line may have as many as 52 data points. Bar charts may include up to six categories with 12 points in each for a total of 72 bars on the screen. A pie chart uses only the first range defined and may graph up to 12 numbers as segments of the pie. An agreeable feature of the program is its ability to "explode" individual slices of a pie chart to highlight important data.

Visualizer graphs are scaled automatically by the program. However, the user has the option to change that scaling. For example, if a graph has a maximum height of 875, a user might change the maximum axis value to 1,000. All elements of the graph then would be drawn slightly smaller to fit the wider scale range.

As in AppleWorks, online help is available by pressing the ? key. The program comes with a 44-page spiral-bound manual illustrated with pictures of the graph types the program is capable of producing. However, the manual suffers from a limitation that is too common in software priced under $100: the lack of an index. Aside from that, the manual is adequate.

Visualizer is easy to use, and it is menu driven. It compares favorably with other graphics packages both in its range of capabilities and the quality of its output. Its ability to process data from AppleWorks, the most widely used integrated software package for the Apple, should make Visualizer extremely popular.

*Brian D. Monahan is an associate professor of computer science at Iona College in New Rochelle, N.Y. He has published dozens of articles on computing in scholarly and popular journals.*

Trademarks: Apple, Apple IIe, Apple IIc, Apple IIGS, AppleWorks and ImageWriter (Apple Computer Inc.); Epson FX (Epson America Inc.); Lotus and Lotus 1-2-3 (Lotus Development Corp.).

GO OLI or circle 20 on the Reader Service Form.

## Electronic Edition Hardware Reviews

The following hardware reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-220 at any CompuServe Information Service prompt.

**Datavue's Spark Laptop Computer**
**Manufacturer:** *Datavue Corp.*
**Computer:** *Spark portable computer (IBM PC compatible).*

**Commodore's PC10 Computer**
**Manufacturer:** *Commodore Business Machines Inc.*
**Computer:** *Commodore PC10 (IBM PC-XT compatible).*

**Apple's Macintosh SE Computer**
**Manufacturer:** *Apple Computer Inc.*
**Computer:** *Apple Macintosh SE.*

**Apple's Color Macintosh II Computer**
**Manufacturer:** *Apple Computer Inc.*
**Computer:** *Apple Macintosh II.*


## Eyes Hurt?

UltraViolet radiation is produced by the glowing phosphors of a computer screen. When reverse video is used, as with the Macintosh, higher levels of UV are produced than with conventional monitors. This UV light can cause pain in the eyes of sensitive individuals.

If your eyes hurt when using a Macintosh, chances are your eyes are sensitive to UV. Eye-Guard MXP is made of 30% lead-impregnated acrylic, designed to block several important types of radiation, including UV. It's the same material used to protect workers in hospitals and nuclear power plants, and also blocks microwave and x-ray radiation that may be generated by your computer in small amounts.

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For more information or to order, call toll-free,

**(800) 221-7070**

Langley-St.Clair
Instrumentation Systems, Inc.
132 W. 24th St., New York, NY 10011
CompuServe: 70007,1176

GO OLI or circle 21 on the Reader Service Form.

## SuperLaserSpool

***Frees Computers from Printer Waits***

SuperMac Software
950 N. Rengstorff Ave.
Mountain View, CA 94043
415/964-8884

**Computer:** 512K Apple Macintosh.
**Operating System:** The Finder.
**Media:** Requires one disk drive.
**Copy Protection:** None.
**Required Peripherals:** Printer.
**Other Requirements:** At least 512K of RAM.
**Optional Items:** None.
**System used for test:** Macintosh Plus with 880K internal drive, 440K external drive and ImageWriter printer.
**Retail Price:** $149.95 for single user; $395 for up to five users.

*Reviewed by Cheryl Peterson*

SuperLaserSpool is a print utility that spools information to a temporary file and then sends that data to a printer. Spooling is a background task, so keyboard control returns quickly to the user.

But SuperLaserSpool goes further. When several computers on the AppleTalk bus use the same printer, SuperLaserSpool queues up files and waits for other computers on the bus to complete their tasks. Then it sends the files in its queue when the time comes. Users on the network can give files higher or lower priorities or rearrange the queue when needed.

You can queue files with the spooling facility paused. This effectively lets you line up files and print them on your lunch break or at day's end.

Although spooled files do occupy disk space, they're stored in compressed format. Typically, 35K is required to spool files. A view option is available for examining spooled files.

Different formatting is used for files spooled to the ImageWriter, LaserWriter or AppleTalk. Thus, a file spooled for a LaserWriter must be respooled to use an ImageWriter.

One disadvantage is that once a print buffer size is set, you can't change it without powering the whole system down. This is offset by the fact that SuperLaserSpool can be set as the boot application that then loads another task automatically.

The documentation was well done with a good question-and-answer section that addressed most of SuperLaserSpool's difficult concepts. My only real objection is its price. I had it pegged as worth $79.95, so the $149.95 list price caught me off guard.

*Cheryl Peterson, a free-lance writer from Miami Beach, writes reviews for several computer magazines. Her CompuServe User ID number is 72366.2645.*

Trademarks: Apple, ImageWriter, LaserWriter and AppleTalk (Apple Computer Inc.); Macintosh (McIntosh Laboratories Inc. licensed to Apple Computer Inc.); SuperMac and SuperLaserSpool (SuperMac Software).

GO OLI or circle 22 on the Reader Service Form.

## Glue

***Manipulates Macintosh Clippings***

Solutions
P.O. Box 989
29 Main St.
Montpelier, VT 05602
802/229-9146

**Computers:** Apple Macintosh, 512K Macintosh, Macintosh Plus, Macintosh XL, Macintosh SE and Mac II.
**Operating System:** The Finder.
**Media:** Requires one 3.5-inch disk drive.
**Copy protection:** None.
**Required Peripherals:** ImageWriter, LaserWriter or other printer.
**Other Requirements:** None.
**Optional Items:** AppleTalk bus.
**System used for test:** Macintosh SE with Imagewriter printer.
**Retail Price:** $59.95 for single user; $250 for network version; site licensing available.

*Reviewed by Cheryl Peterson*

The name "Glue" is something of a misnomer and doesn't come close to describing what this program can do. While it implies inserting or pasting something into a file, it doesn't hint at the source of the material. It is hard to conceive of cutting an article out of a magazine and then using this program to "glue" the clipping into a Macintosh application, but if you visualize cutting the material from a "disk based" magazine, the analogy becomes more obvious.

However, Glue isn't just for pasting items into applications. It is also used to "cut" the article out and reformat it so another application can use it. The Macintosh saves files in several different and incompatible formats, and some applications even use their own formats that can't be read by any other programs. Glue makes transitions among them for you because it actually intercepts print commands and "prints" the picture to a disk file that can be read by most other application programs.

The Glue package consists of two segments, the ImageSaver and the Viewer. Appropriately, the icons for these are a camera and what looks like a ViewMaster viewer.

ImageSaver is installed just like any other print driver on an application disk. It is necessary to have the ImageSaver module in the folder with whatever application is being run.

Because ImageSaver can be used with many programs, you may want to install it on several disks or in several application folders on a hard disk. This presents no problem at all. Files created with ImageSaver have unique icons, so they are easily differentiated from data files for other applications.

The Viewer is used to examine print files and to print them out. With it, you can easily view files that are bigger than the Macintosh screen. Other programs have limited abilities in this particular area. The Viewer also can take ImageSaver-created files and convert them to MacPaint format so they can be modified with ease. In turn, MacPaint files can be used by the Viewer without modification, and any files created by a program and saved in MacPaint format also work with the Viewer.

To move files from one application to another, first print the file using the ImageSaver. Then view it with the Viewer. While viewing, cut or copy all or part of the file into the clipboard or scrapbook. After closing the Viewer, open the application that is the destination for the material. Then use the paste command to insert the clipboard or scrapbook item. Although this sounds like a bit of work, it is worthwhile if you need to move information between incompatible applications.

If you need to change the axis on the printout, you can indicate that you want the file printed in landscape format (lengthwise on the page) instead of portrait format. You also can print selected pages from an item rather than the entire file.

One excellent use for Glue is putting information in a format that allows it to be sent by modem. Normally, two problems arise: Either the modem program can't send the file format of the application, or the receiving computer's modem program can't use the format. Sometimes this can be overcome, only

to discover that the file sent is incompatible with the receiver's application programs. Now, Glue can translate the file into a "universal" format to simplify this whole procedure.

The documentation is short, sweet and to the point. Well illustrated, it contains everything needed to get the application working. Furthermore, the documentation explains some limitations of the program. For instance, when using PageMaker with ImageSaver, the quality of the printouts will be the same as if they had been sent to an Imagewriter.

This is an appealing package. By the time discounters get through with the price tag, it will be an excellent value.

*Cheryl Peterson, a free-lance writer from Miami Beach, writes reviews for several computer magazines. Her CompuServe User ID number is 72366.2645.*

Trademarks: Apple, AppleTalk, Imagewriter, LaserWriter and MacPaint (Apple Computer Inc.); Macintosh (McIntosh Laboratories Inc., licensed to Apple Computer Inc.); Glue, ImageSaver and Viewer (Solutions Inc.); PageMaker (Aldus Corp.).

GO OLI or circle 23 on the Reader Service Form.

## Electronic Edition Software Reviews

The following software reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-230 at any CompuServe Information Service prompt.

**Doug Clapp's Word Tools**
**Manufacturer:** *Aegis Development*
**Computers:** *Apple Macintosh series.*

**Diga! Communications Software**
**Manufacturer:** *Aegis Development*
**Computer:** *512K Commodore Amiga.*

**Crosstalk Mk.4 Communications Software**
**Manufacturer:** *Crosstalk Communications/DCA*
**Computers:** *IBM compatibles.*

**Mirror II Communications Software**
**Manufacturer:** *SoftKlone Distributing Corp.*
**Computers:** *IBM compatibles*

**DataFlex Database Manager**
**Manufacturer:** *Data Access Corp.*
**Computers:** *IBM compatibles and others.*

**PopDrop 3.0 Memory-Resident Program Manager**
**Manufacturer:** *InfoStructures Inc.*
**Computers:** *IBM compatibles.*

**Smalltalk/V Programming Language**
**Manufacturer:** *Digitalk Inc.*
**Computers:** *IBM compatibles.*

**Turbo C Programming Language**
**Manufacturer:** *Borland International Inc.*
**Computers:** *IBM compatibles.*

**Quant IX 3.0 Portfolio Evaluator**
**Manufacturer:** *Quant IX Software*
**Computers:** *IBM compatibles.*

**MultiMate Advantage II Word Processor**
**Manufacturer:** *MultiMate International Corp.*
**Computers:** *IBM compatibles.*

**DOS Manager, Direc-Tree Plus & Menu Express**
**Manufacturers:** *SoftStar International Inc., Micro-Z Co. and FirsTrack Systems Inc.*
**Computers:** *IBM compatibles.*


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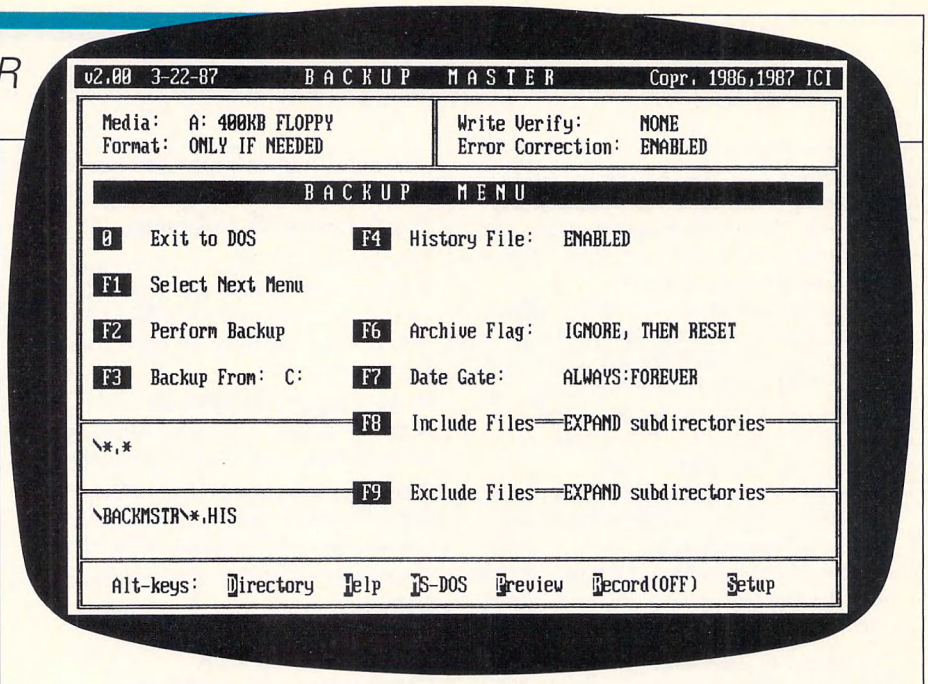
# Backup Master 2.0

***Won't Let a Crash Spoil Your Day***

Intersecting Concepts
80 Long Court, #1A
Thousand Oaks, CA 91360
805/373-3900

**Computers:** IBM PC, PC-XT, PC-AT, PC-Convertible and close compatibles.
**Operating System:** PC-DOS or MS-DOS version 2.1 or higher.
**Media:** Requires one 360K diskette drive and a fixed disk.
**Copy Protection:** None.
**Required Peripherals:** None.
**Other Requirements:** Minimum 384K of available RAM.
**Optional Items:** High-density diskette; second disk drive.
**System used for test:** 640K Compaq Deskpro 286 with one 1.2MB diskette drive and one 20MB hard disk.
**List Price:** $89.95

*Reviewed by Harry Green*




**Protective program:** *Backup Master provides peace of mind*

Show me someone who religiously backs up a hard disk, and I'll show you someone who probably has lost hours of work and valuable data to a disk crash. The rest of us skate along taking a chance, and more times than not, we get away with it.

One reason we're reluctant to back up is the time it takes. The DOS "backup" command isn't easy to follow, and it is slow. Unattended backup on streaming tape is ideal but costly, which explains the need for Backup Master.

Backup Master (version 2.0) differs from the DOS backup command in three ways: it is faster, it puts more information on a diskette, and it is menu driven and thus easy to use. What's more, it formats diskettes as it goes.

Backup Master supports both high- and double-density diskettes. The program estimates how long a backup will take, how many diskettes are needed and how many bytes per minute will be transferred. In my first run, it estimated 14:03 minutes to back up 14MB, but it took twice that long because the diskettes were unformatted. For a second full backup, the estimated time was 11:20 minutes, and the actual time was 10:47 minutes.

For 14MB, the program estimated and used 23 diskettes for a density of 622K each. Another backup utility I used took 37 diskettes for the same data. A DOS backup would have required 39 diskettes.

As a backup proceeds, Backup Master keeps you informed of progress, displaying estimated and actual times, diskettes and files. When it is time to change diskettes, the program beeps, but the drive keeps running. In fact, the red light doesn't go out until the job is completed, which is one way the program achieves speed. It also can use two drives, alternating between them to eliminate delays in changing diskettes.

An important main menu choice involves the archive flag. The program lets you ignore the flag to backup all files, use and then reset the flag, or use but not reset the flag. The latter two options support two strategies. If the flag is reset, an incremental backup saves files that have changed since the last full or incremental backup. The other strategy provides differential backup and stores all files that have changed since the last full backup. Differential backup takes more time but is easier to restore and takes fewer diskettes. If you make a regular habit of backing up files, the incremental strategy is faster.

Another strategy is based on dates. A date gate, selected from either the backup or restore menus, lets you exclude files stamped before a starting or after an ending date. A third strategy includes or excludes specific paths, files or directories. This is useful for managing a disk that is nearly full. It also saves time if you exclude unprotected programs for which you have master diskettes.

The restore function operates as easily as backing up. The restore menu provides options for selecting the path, and offers an option of overwriting files only if an existing file on the hard disk is older than the backup file. The program does not restore hidden files.

Another main menu option displays a tree-structured directory on one side of the screen and a list of files on the other. The display gives no information about the files, but does list them more conveniently than the DOS directory command. The directory is not an essential feature, but a related preview option displays a diamond symbol by every directory and file that will be backed up. This, together with the backup menu, gives you a good idea of the task's magnitude.

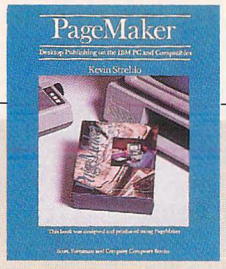
Two other useful features are error correction and a history file. When error correction is enabled, Backup Master stores a code on each diskette to let you restore at least part of a file even if the disk is damaged. The history option writes an ASCII file that details all files created during each backup.

If backing up a hard disk is something you do only about as often as you clean out your desk just because it is such a pain, I recommend this program. It has all the attributes left out of DOS. Making a backup still isn't exactly fun, but without it, a crash could spoil your whole day.

*Harry Green is a free-lance writer from Portland, Ore. He writes about telecommunications, office automation and personal computer-related topics. His CompuServe User ID number is 70007,431.*

Trademarks: Backup Master (Intersecting Concepts Inc.); Compaq and Deskpro 286 (Compaq Computer Corp.); IBM, IBM PC, PC-XT, PC-AT, PC-Convertible and PC DOS (International Business Machines Corp.); MS-DOS (Microsoft Corp.).

GO OLI or circle 25 on the Reader Service Form.




**Producing publications:** *PageMaker*

## PageMaker:

***Desktop Publishing on the IBM PC and Compatibles***

By Kevin Strehlo
Scott, Foresman and Company, 1986
298 pages; $21.95 (softcover)
*Reviewed by James Moran*

What's Trump Mediaeval? How about WYSIWYG? Do you know why ascenders and descenders are important even if you don't use department store escalators? When's the last time you had a "bad break" that wasn't associated with your lifestyle? The answer to these and other questions that might not seem appropriate for a family magazine are in *PageMaker: Desktop Publishing on the IBM PC and Compatibles*.

Those who haven't kept up with the more current history of PageMaker may do a double-take at the title, but it is correct. Although Macintosh users may have had a monopoly on PageMaker, the retail version for use on the IBM PC was released while Kevin Strehlo's book was being written. Having an unusual vantage point from which to examine the software—he used both the Mac and IBM versions to help create this book—the author felt that the IBM PC version was faster, more complete and freer of bugs than its predecessor.

This book will help you to produce professional quality publications when using an IBM or IBM-compatible with PageMaker. If you're new to desktop publishing, you'll learn that PageMaker instructs your IBM PC (preferably an AT-level model) to function as a typesetting machine and allows you to paste up pages electronically.

Since Strehlo doesn't make many assumptions about his readers, even beginners won't find it difficult to learn the basics of page design from this book. They'll find some compelling reasons why they should consider moving all of their publishing needs to the nearest desktop, especially since PageMaker can cut their publishing costs in half.

Readers who are competent with computers and graphics needn't worry about being bogged down with too much explanatory material. Remedial information is sandwiched around the core of the book, and more advanced readers will simply skip over the introductory chapters or ignore some of the appendixes.

The first of four main sections introduces PageMaker for the IBM computer. It is here that much of the beginner's material resides.

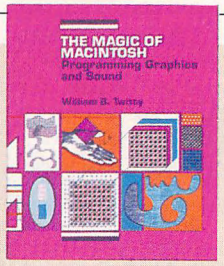
Part II includes a chapter that examines hardware, such as printers, displays and scanners. With a primary emphasis on printers, the discussion centers on the various approaches to creating printed images. The following chapter examines software, such as InTalk, PC Paintbrush and other Windows applications that complement PageMaker.

The third part of the book covers report presentations, advertising and marketing. A particularly useful section on preparing long documents leads to the fourth and final section of Strehlo's book.

Last is a section that examines alternative extensions available outside of PageMaker. Included are discussions on how to use service bureaus that offer everything from design help to time rental on a laser printer. And if PageMaker is just too little, or too much, for you, the author has more than a few useful suggestions.

As the cover blurb accurately states, if you want to produce professional quality documents on your IBM PC or compatible with PageMaker, this is the book for you.

*James Moran is vice president of Programming Service Corp., a Midwestern consulting and research firm. His CompuServe User ID number is 70007,2253.*




**Graphics guide:** *Magic of Macintosh*

## The Magic of Macintosh

By William B. Twitty
Scott, Foresman and Company, 1986
314 pages, $19.95 (softcover)
*Reviewed by James Moran*

If you're new to the Macintosh, or even an old-timer, you'll spend a great deal of time working and playing with the Mac's graphics. *The Magic of Macintosh* is a book that can get you started writing your own graphics programs. There are lots of examples and more than 50 sample programs in Macintosh Pascal.

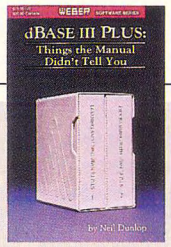
Writing programs to use the Mac's graphics and sound capability may seem exotic, but it is not all that hard if you have a good guidebook. This one starts gently, with an introduction to the hardware, some useful graphics terminology and a quick look at QuickDraw, the ROMware tool for drawing pictures (and text) on the Macintosh screen.

William Twitty has decided on Pascal for all of the programming in the book because he considers it to be a language suited to the experimentation he coaxes readers to try. It is also ideal for accessing the QuickDraw routines in the Mac's ROM and includes all the necessary documentation for QuickDraw.

Once past the introductory chapter, readers are quickly immersed in programming code. The book progresses logically and some programming techniques that at first are not clear will become so in later chapters. The author's treatment of QuickDraw is consistent: if a new concept is discussed, at least a few lines of explanatory programming code are always nearby. A nice bonus is that all the programming examples are pre-tested routines that readers can copy for use in their own programs.

Although this book centers on graphics and sound programming, readers won't find much information about the mechanics of Pascal programming. They should either be familiar with Macintosh Pascal or be prepared to learn it elsewhere. The author's stated purpose is for readers to have fun with the Mac's graphics and sound and, along the way, learn how to write useful programs. *The Magic of Macintosh* is perfect for those who know how to program but have no experience with QuickDraw.

*James Moran is a free-lance writer and frequent contributor to* Online Today. *His CompuServe User ID number is 70007,2253.*




**Adding information:** *dBase III Plus*

## dBase III Plus:

### *Things the Manual Didn't Tell You*

By Neil Dunlop
Weber Systems, 1986
199 pages, $19.95 (softcover)
*Reviewed by William J. Lynott*

No matter how well informed the writers of a users manual may be, there are always program features in computer software that wind up poorly documented or even overlooked entirely. Most computer magazines carry "tips" about this as a widening base of users share their discoveries with others. I have personally made use of a number of such handy tips that apply to the various applications programs I use, including dBase III Plus.

Is it likely that one person could accumulate a sufficient number of such shortcomings of the users manual for this major software product to justify an entire book? As far as I'm concerned, the jury is still out.

*DBase III Plus: Things the Manual Didn't Tell You* does indeed offer an impressive amount of information and operating tips for users of dBase III Plus. However, the majority of it is better classified as instructive and explanatory rather than "discoveries" of undocumented features. While I did find a number of undocumented ideas, they were relatively few when compared to the total contents of the book.

The major strength of this book is in its approach to the more sophisticated applications of dBase III Plus. Many of the dBase III books now on the market are clearly aimed at the beginning user. The Assistant feature in dBase III makes it possible for beginners to put basic capabilities of the program to work almost immediately, and many books concentrate on that approach.

Most advanced users will agree, though, that the real power and flexibility of dBase III is released only through the use of direct commands through the dot prompt. *Things the Manual Didn't Tell You* is for the user who is already familiar with this notion and wants to gain maximum skill in the subtleties of the program.

After a few introductory chapters on dBase III fundamentals, the book explains how to make use of the program's advanced features. Individual chapters cover such things as dBase III functions, transaction processing in an accounting file, and using SAY statements for output. The two chapters that I found to be the best source of undocumented assistance were the one on using the report generator and one titled "Nuances of Indexing."

This isn't a large book as far as bulk is concerned. At 199 pages, it is smaller than most on the bookshelf in its price range. However, if you're an advanced user of dBase III and want to make sure you're not missing out on the more sophisticated applications that this program can handle, you'll find that it contains more help than may be evident at first glance.

*William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.*

## The Professional User's Guide to Acquiring Software

By John L. Connell and Linda Shafer
Van Nostrand Reinhold Co., 1987
310 pages, $32.95 (hardcover)
*Reviewed by Harry Green*

If you've ever worked on a major software project, either as a programmer or a user, you've experienced the inevitable difficulties: Programs invariably take longer than expected, deliver less than promised and are put online before they are ready. *The Professional User's Guide to Acquiring Software* explains why this happens and offers tools to help you avoid these frustrations.

This book is written for a narrow audience—users responsible for obtaining data processing services in large organizations. The authors assume that the reader is outside the data processing group and is not a software expert. An opening section in every chapter explains, in terms that most readers will find easy to understand, the terminology introduced in that chapter. The authors have achieved their objectives of giving you enough information to meet data processing professionals on their own ground and to interpret the jargon you will encounter. If you grasp all the concepts in this book, you may even teach the professionals a thing or two.

*The Professional User's Guide* will help you tackle such tough problems as determining whether a deficient program should be corrected, rewritten or replaced by packaged software. You'll learn the idea of psychological complexity as one of the determining factors in this decision. A psychologically complex program is one with undocumented procedures, unidentified variable names and an excessive number of branches. Anyone who has ventured into such a program will understand why it may be easier to rewrite than to overhaul.

The authors propose a model for estimating how long program development will take but warn that traditional means of measuring, such as numbers of lines of code, are unreliable. A well-structured program may have more code than a poor one, yet take less time to develop. The book explains useful techniques for controlling each phase of a program's life cycle from inception to termination.

Several methods of structured analysis are explained and coding and testing techniques are covered. Plus, the book discusses the bugaboo of all programmers and users: documentation.

Techniques of rapid prototyping—developing a model that users and programmers can test and debut as a way of both parties understanding the project design—are explained. The prototype is a skeleton to which flesh is added as objectives become clearer.

Chapters are included to help you to understand software quality assurance, software maintenance and evaluating software department administration.

This book will be an invaluable aid to anyone representing the user organization in a major software project. I have filled such a role and experienced the frustrations of the invariable communication gap between users, who expect a particular result that they may not clearly understand, and programmers caught between inflexible deadlines and changing requirements. This book should help bridge the gap, particularly if the data processing people read it.

*Harry Green is a free-lance writer from Portland, Ore. He is author of* Automating Your Office *and* Local Area Networks. *His CompuServe User ID number is 70007,431.*

## Microsoft Word

By Nancy Andrews
Microsoft Press, 1987
309 pages; $19.95 (softcover)
*Reviewed by Darrow Kirkpatrick*

Microsoft Word has always been among the top few word processors on the market, and given Microsoft's position in the industry, it is likely to stay near the top. Word does just about everything other word processors can do and is especially capable at using the different fonts, font sizes and special effects on laser printers. For me, Word is unmatched at producing a professional looking document on paper, but other programs remain easier and faster for entering and manipulating ideas.

Nancy Andrews' *Microsoft Word* is a complete dictionary to Word version 3.1. Using alphabetically arranged entries illustrated by examples and crisp screen displays, Andrews gives detailed information about each Word command and feature. Her "comments" sections are especially interesting—it is here that Andrews passes on personal observations, tricks and techniques for using Word.

Even though I've read all of Word's documentation cover to cover, I still made discoveries from Andrews' clear discussions. The book showed me new uses for obscure paragraph formats and new mouse and command shortcuts. Andrews also has a fresh approach to basic concepts—a diagram makes Word's baffling outline modes clearer, and her discussion of the terms "pitch" and "point" is enlightening.

Andrews does Word users a service by pointing out traps and limitations that are glossed over in the Word documentation. She discusses footnoting restrictions, conflicts in table of contents and index generation, limitations in sharing style sheets on a network and the curious SAVE flag that occasionally blinks into life.

Unfortunately, large sections of *Microsoft Word* are simply a rehash, though a good one, of the Word documentation. For example, Andrews devotes 18 pages to a listing of error messages that is almost identical to that in the Word reference manual.

However, neither Word's documentation nor Andrews' book explain what, if any, philosophy is driving Microsoft's command choices. Compared to the unity of a program such as Framework, Word's command structure is illogical and confusing. For example, I had been using Word for several weeks before it dawned on me that most of the text formatting commands make use of the Alt key. Occasionally Andrews falls into the similar trap of giving step-by-step descriptions for performing a function, without explaining to readers what they are doing.

*Microsoft Word* could be helpful to Word users at all experience levels. For the newcomer, it provides a complete reference to Word's commands and features as well as such helpful sections as a checklist of printer problems. For experienced users, the book has advanced formatting tips and technical sections, such as one for modifying printer drivers. However, the bulk of the information in the book is appropriate for the moderately experienced user, who for one reason or another does not want to turn to Word's documentation.

*Darrow Kirkpatrick is an independent computer consultant and technical writer living in New Paltz, N.Y.*

## Electronic Edition Book Reviews

The following book reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-240 at any CompuServe Information Service prompt.

**Inside Xerox Ventura Publisher**, *by James Cavuoto and Jesse Berst, Micro Publishing/New Riders Publishing.*

**Working with WordPerfect**, *by Beverly and Scott Zimmerman, Scott, Foresman and Co.*

**Apple IIGS Technical Reference**, *by Michael Fischer, Osborne/McGraw-Hill.*

**The World of GEM**, *by Joe Guzaitis, Joe Byrd and Phil Balma, Prentice-Hall.*

**Artificial Intelligence Using C**, *by Herbert Schildt, Osborne/McGraw-Hill.*

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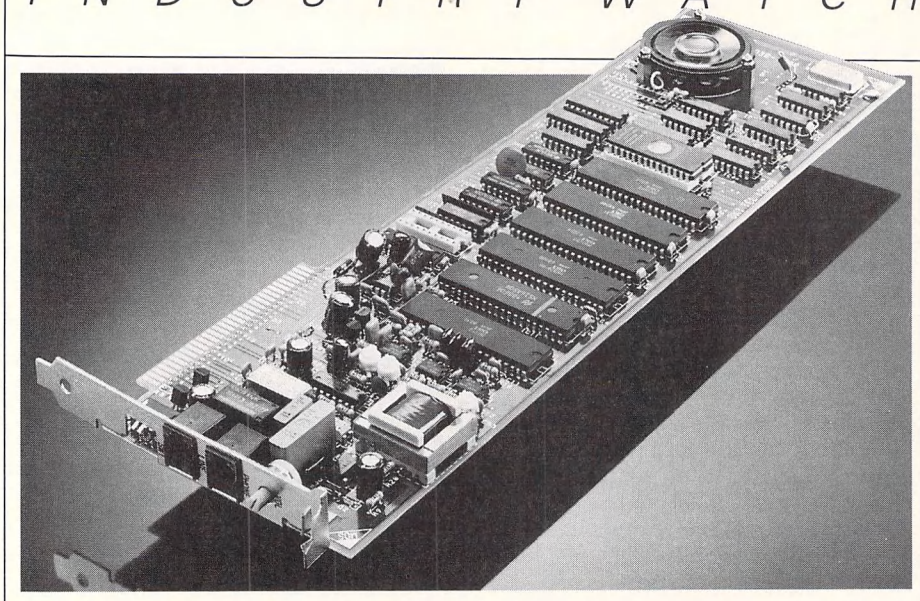


## Okidata Modem

Okidata has introduced the Okidata 1200b, a 300- and 1200-baud internal modem featuring Automatic Adaptive Equalization.

Features include automatic adjustments to varying phone line quality, auto-dial, auto-answer and automatic disconnection of the phone line when a call is incomplete. The product comes bundled with Okitel II communications software that provides every feature necessary for error-free communications. Designed for the IBM PC and compatibles, the modem sells for $389. Free connect time to CompuServe is also offered.

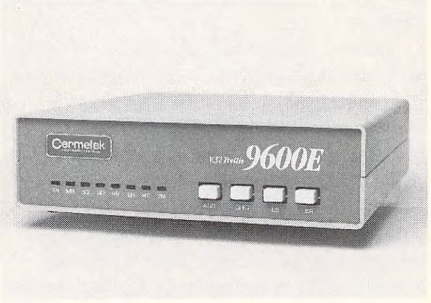
For information, contact Okidata, 532 Fellowship Rd., Mt. Laurel, NJ 08054; 609/235-2600.

## High-Speed Modem

Cermetek Microelectronics Inc. has introduced its new 9600E, a second generation CCITT V.32/9600 baud full-duplex high-speed modem with built-in backward error correcting that supplements the trellis coding and forward error correcting capability.

Additional features include synchronous operation dialing and alternative automatic dial back-up via the PSTN if a leased line connection fails. It is available with international interfaces and power supplies.

For information, contact Cermetek Microelectronics Inc., 1308 Borregas Ave., Sunnyvale, CA 94088-3565; 408/752-5000.




## 0-Wait State

Club AT has introduced the Club 286 Model B 10MHz 0-Wait State IBM PC-AT-compatible computer.

Features of the new model include 10/8 MHz switchable speeds that are keyboard selectable, power-on reset, two serial and one parallel ports, 195 watt power supply, 1.2MB floppy drive, maxi switch keyboard, clock/calendar with battery back-up and more. Retail price is $1,395.

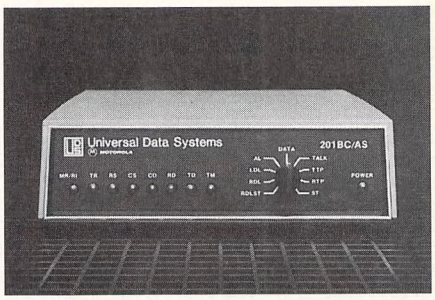
For information, contact Club AT Inc., 46707 Fremont Blvd., Fremont, CA 94539; 415/490-2201.

## UDS 2400-Baud Modem

Universal Data Systems has introduced the 201 BC/AS data modem that provides full-duplex operation over two-wire dial-up or four-wire private lines or half-duplex operation over two-wire private lines.

Retailing for $685, the modem can transmit either synchronous or asynchronous data for greater software compatibility. The stand-alone modem is interchangeable with Universal Data Shelf enclosure for convenient storage of up to 16 UDS data communication devices.

For information, contact Universal Data Systems, 5000 Bradford Dr., Huntsville, AL 35805-1953; 205/837-8100.




## Auto Modem

The Black Box Auto Modem 1200 from Black Box Corp. is a fully Hayes compatible unit designed for heavy duty use in any inter-office or long-distance data communications network.

Retailing for $275, the desktop device provides full-duplex, asynchronous transmission over the switched telephone network at either 300 or 1200 bps data rates. It features automatic or manual dialing or answering and a soft option control that eliminates switch-setting for smart or dumb terminal use.

For information, contact Black Box Corp., P.O. Box 12800, Pittsburgh, PA 15241; 412/786-5500.

## Brother Printer

The Brother HR-40 printer from Brother International Corp. is a letter-quality printer that features both a built-in sheet feeder and a built-in forms tractor.

Retailing for $799, the HR-40 also features the unique "Paper Parking" capability, a triple-bin sheet/envelope feeder, second color printing and an optional keyboard.

For information, contact Brother International Corp., 8 Corporate Pl., Piscataway, NJ 08854; 201/981-0300.

## In-Synch

A new, upgraded version of In-Synch teleconferencing software is now available from American Video Teleconferencing Corp.

In-Synch allows microcomputer users to compute simultaneously or "co-run" applications on their IBM PCs. If both users have the same application package, In-Synch lets them run the program simultaneously and interactively, sending keystrokes in both directions. Screens of text can also be transmitted. Version 2.0 features a more simplified installation procedure, compatibility with both IBM and Paradise Enhanced Graphics Adapters, support for Expanded Memory Specification, comprehensive online help and more. Retail price is $495 for a "twin pack" or $295 for a "single pack."

For information, contact American Video Teleconferencing Corp., 100 Bi-County Blvd., Farmingdale, NY 11735; 516/420-8080.

## Crosstalk Enhanced

Crosstalk Mk. 4, a faster, more powerful version of the popular communications software, has been introduced by DCA's Crosstalk Communications.

Crosstalk Application Script Language, a full-featured programming language, is an integral part of the new program and includes a full array of statements, operators and functions for manipulation of screen windows, data files, numeric and alphanumeric data. CASL simplifies the writing of complex custom applications so the software will automatically dial up, log on, conduct multiple interactions and log off without repetitive keyboard entries. Retail price is $245.

For information, contact Digital Communications Associates Inc., 1000 Holcomb Woods Parkway, Roswell, GA 30076; 404/998- 3998.

### What's Going On?

If you want to know what's going on around CompuServe, check into *Online Today Electronic Edition*. Here you'll find constantly revised news for and about the CompuServe community. GO OLT-50 from any prompt on the CompuServe Information Service.

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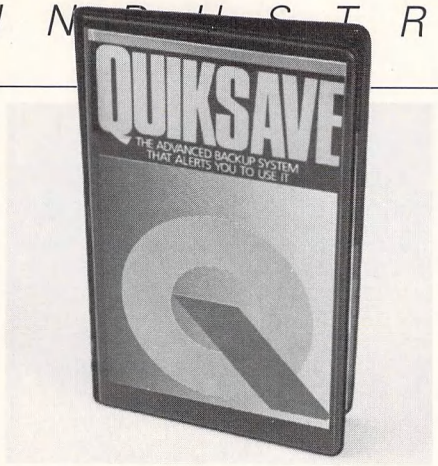


## QuikSave

QuikSave from Micro Interfaces Corp. is a hard-disk backup program that maintains rigid backup schedules and prevents the data losses associated with infrequent backups.

The program allows the user to set backup schedules, which are then monitored by QuikSave. Up to nine different backup schedules can be tracked at one time. When backups are due, QuikSave alerts the user and then automatically backs up the appropriate data. It is capable of backing up 10MB of data in less than eight minutes on the IBM PC-XT and less than four minutes on PC-ATs and compatibles. Retail price is $99.

For information, contact Micro Interfaces Corp., 16359 NW 57th Ave., Miami, FL 33014; 800/637- 7226.

## Mainframe Communications

The Santa Cruz Operation has introduced SCO uniPATH SNA-3270 Mainframe Communications (Release 1.2) package for multi-user, multi-tasking XENIX-based PC systems.

Features include file transfer capability, customizable ASCII/EBCDIC translation tables, support for the UDS line of Sync-Up internal synchronous, auto-dial modems and support for the Persyst MPC-UII synchronous serial card. The software/hardware package allows XENIX-based personal computer systems to operate on IBM SNA networks by emulating an IBM 3274 cluster controller with attached 3270 display and printer devices.

For information, contact The Santa Cruz Operation, 400 Encinal St., P.O. Box 1900, Santa Cruz, CA 95061; 408/425-7222.

## StreetSmart

A software program that provides detailed directions along city streets and plans delivery routes for efficiency has been released by Street Map Software.

StreetSmart will accept up to 100 destinations for one trip and then sort them into an efficient order to minimize travel distance. The program allows the user to build a customized map of any town. The map can be refined with distances, one-way streets and block addresses. StreetSmart sells for $89 and is designed for an IBM PC or compatible.

For information, contact Street Map Software, 1014 Boston Circle, Schaumburg, IL 60193; 312/529-4044.

## Electronic Edition Product Annoucements

The following new product announcements are available this month on *Online Today Electronic Edition* by typing GO OLT-250 at any prompt.

**Switch-It**, *enables IBM PC programs to pop up like a memory resident program, VuSoft Inc.*

**EXP-512**, *RAM expansion board and clock/calendar for the Commodore-Amiga 500 computer, Progressive Peripherals and Software.*

**SuperGlue**, *allows Macintosh users to print to disk the graphic output from most Macintosh applications, Solutions International.*

**Saywhat?!**, *screen design and presentation utility for the IBM PC, PC-XT, PC-AT, PS/2 systems and compatible computers, The Research Group.*

**Flash-Up and Flash-Up Developer's Toolbox**, *advanced macro, menu and note maker for the IBM PC and compatibles with a toolbox for developers, The Software Bottling Co.*

**PicturePower**, *software system for the IBM PC, PC-XT, PC-AT and compatibles that incorporates photographic quality pictures into databases, PictureWare Inc.*

**The Addcard**, *four expansion slots for the IBM PC, Merak Industries.*

**MacMoney**, *financial recordkeeper and management program for the Macintosh, Survivor Software Ltd.*

**Smart Speaker**, *advanced text to speech product for the IBM PC, PC-XT, PC-AT and compatible computers, Swisscomp Inc.*

**MemoryMate**, *data manager for the IBM PC, Tandy and compatible computers, Broderbund Software.*

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(Reviewed by PC Week on 5/19/87)

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CompuServe Page OLI-1
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1. OLI Instructions
2. Online Today Display Ads
3. Print Edition Reviews
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GO OLI-160. Inquiries to this section will be followed by a brief description of the *Online Today* ad. To request additional printed information, simply enter your name and address at the prompts. OLI will add your User ID number and electronically forward your request to the appropriate advertiser(s). The names, addresses and User ID numbers will also be forwarded via US Mail at the end of each month.

CompuServe Page OLI-160
ONLINE TODAY ADVERTISERS/OLI

1. Oct. 1987 Advertisers
2. Sept. 1987 Advertisers
3. Aug. 1987 Advertisers

### Editorial Articles/Reviews

At the end of each electronic version product review, you'll be asked if you wish to request further information through the Online Inquiry system. A "yes" response will let the system prompt you for your name, address and other information so that your request can be forwarded to the appropriate company. If you respond "no," the system will return you to the previous menu.

To request information about products reviewed in the print edition, go to page OLI-280 and select the appropriate listing, such as October Hardware Reviews. At the next menu, select the product you're interested in. If you answer "yes" at the question prompt, the OLI system will prompt you for the necessary information.

Requests to these sections will be stored and forwarded by traditional mail once each month.

CompuServe Page OLI-280
REVIEW LISTINGS/PRINT EDITION

1. Oct. Hardware Listings
2. Oct. Software Listings
3. Oct. New Product Listings

### Shopper's Guide

GO OLI-70 to get information about *Online Today*'s mini-ad program.

To request information from Shopper's Guide advertisers, follow the instructions outlined in each ad.

CompuServe Page OLI-70
SHOPPER'S GUIDE

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2. Rates and Information

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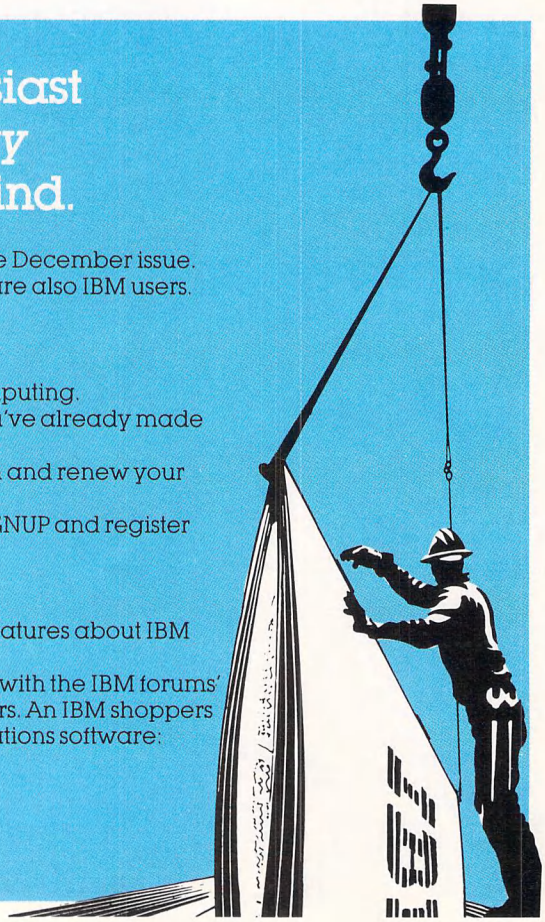

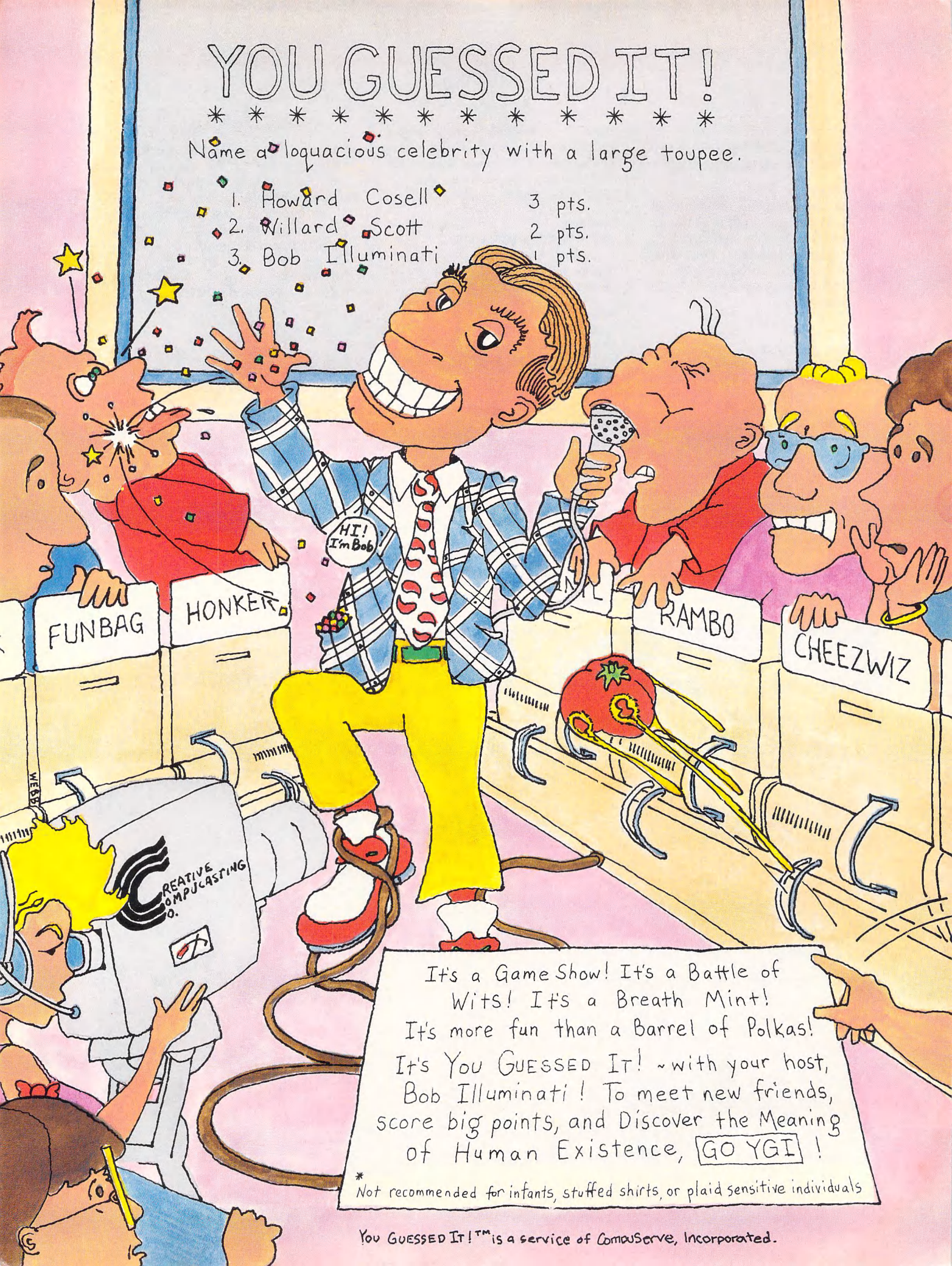
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2. Willard Scott 2 pts.
3. Bob Illuminati 1 pts.
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October issue, not valid after January 1988.

# Online Commerce Thrives in National Bulletin Board

Forum administrators frown on those who try to use their forums for advertisements, and with good reason: Regulars on the system think of forums as one of the last blessedly commercial-free communications media around.

On the other hand, another part of the system—CompuServe's National Bulletin Board—thrives on commerce. Virtually all messages posted on the National Bulletin Board concern buying, selling and swapping. It's like the classified ad section of your newspaper, except that you are not charged extra for your advertisements.

Reach the service by typing GO BULLET at any prompt. About a dozen commands are supported and you can see them all by typing HELP at the feature's main prompt. Primary commands are COMPOSE for writing messages and READ, BROWSE, SCAN and KEYWORD for various ways to search for bulletins.

Three types of messages are posted —items for SALE, items WANTED and general NOTICES—and you can view all messages in a specified category or search for just those of interest.

The easiest way to read material is to BROWSE. Do that by typing BROWSE at the main prompt. The system lists the number of messages in each of the three catagories and asks you to indicate the group you want to search.

After that, the system prompts you for a keyword (or you can press the Return key for all messages). Each bulletin is assigned a keyword by its author. Since literally hundreds of messages are present in each category, it is a good idea to type a keyword to narrow the list.

Once you've typed a keyword, the system shows you the header of the first bulletin it has found, displaying something like this:

```
******************************
#   From:        Date      Keyword
301 70007,411 02-Sep-87 IBM
— Read? (Y or N)! Y
******************************
```

On the left is the message number (each bulletin has its own number), followed by the User ID number of the person who posted it, the date of the posting and the keyword. The prompt asks if you want to read the bulletin (Y for yes, N for no). Also, you can type M to end the BROWSE session and return to the main prompt.

Another way to look through the bulletins is a combination of SCANning and READing. If you type SCAN at the main prompt, you're queried in the same way you are in the BROWSE option—that is, asked for a category (SALE, WANTED or NOTICE) and then a keyword. Then you're shown a list of bulletins the system has found. However, unlike BROWSE, the SCAN option does *not* pause after each message to give you a chance to read it. As you've seen, each message has its own unique number (the code on the left-hand side), so you can use a quick SCAN to get the numbers of messages that look interesting, then type the READ command at the main prompt, which asks for the number of the message you want to see.

You can save time in the National Bulletin Board's BULLET program by anticipating upcoming prompts. Suppose you want to BROWSE the WANTED category for messages about APPLE. Since you know precisely where you're going, you don't have to wade through menus and prompts—at the main prompt, you can type BROWSE WANTED APPLE. Similarly, if you know from a previous SCAN that you want to read message 301, you can type READ 301 at the main prompt.

COMPOSE is the command for creating your own messages on the board. At the main prompt, you can type COMPOSE (or just COM—all of BULLET's commands can be abbreviated to their first three letters). After that, the system prompts with:

```
******************************
National Bulletin Compose
type bulletin. (/EXIT when done)
1:
******************************
```

BULLET's line-numbered editor is the same as the one available in EasyPlex and in the forums. You can write up to fifty 64-character lines. Close the message with /EXIT (or /EX) at the beginning of a new line. After it is closed, you have an option to POST (put it on the message board), EDIT it or TYPE (that is, redisplay) it. When you type POST, the system asks the category in which you wish the message to appear (SALE, WANTED or NOTICE.) Choose one and BULLET then asks for a "keyword." Pick something short; your keyword can be up to 10 characters.

Chip Barthelmas

Subscribers who use the National Bulletin Board regularly often have more than one notice on the board at a time, and there needs to be an easy way to keep track of them. The command for that is CHECK. Typed at the main BULLET prompt, it causes the system to display the numbers, posting dates and keywords of all of your bulletins in each category.

You can delete any message you've posted. The command is ERASE followed by the number of the message, such as ERASE 301.

Messages stay on the National Bulletin Board a maximum of two weeks, then automatically are deleted by the system. Usually, when typing a SCAN or a BROWSE command, you're dealing with messages in that entire 14-day span. On the other hand, if you'd like to look at a smaller age group of messages—say, just those posted in the past five days—you can use the AGE option. When you type AGE, the system prompts you with "type # of days (1-14)."

If you type 5 at that prompt, then all subsequent reading and browsing commands will show only those messages posted in the last five days. If later in the session you want to broaden the field to older messages, return to the AGE option and set a higher number. (When you leave the National Bulletin Board and then return, the AGE is reset to 14 days.)

Two commands are available for leaving the National Bulletin Board—EXIT and BYE. The first takes you out of the BULLET program to a menu; the second logs you off the system.

*Charles Bowen, a contributing editor of* Online Today, *co-authored* How to Get the Most Out of CompuServe *and* CompuServe for IBM Power Users. *His CompuServe User ID number is 70007,411.*

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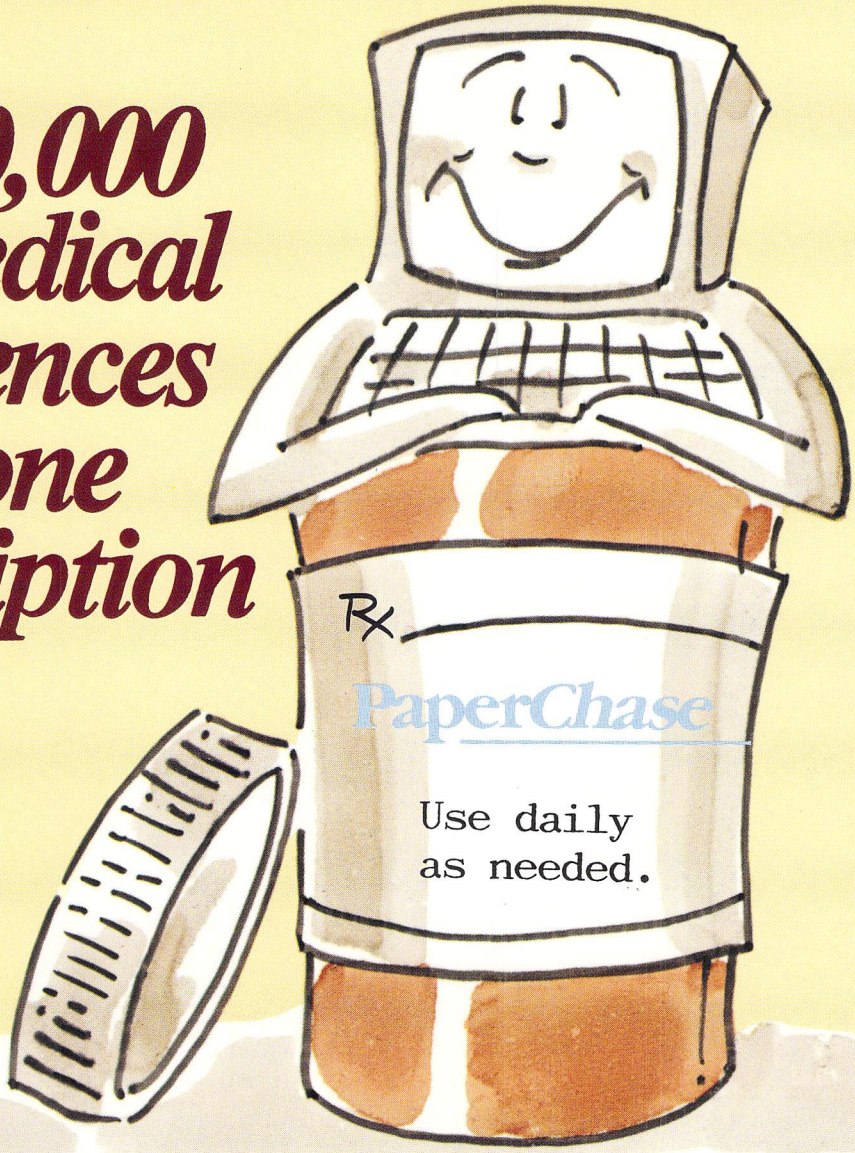


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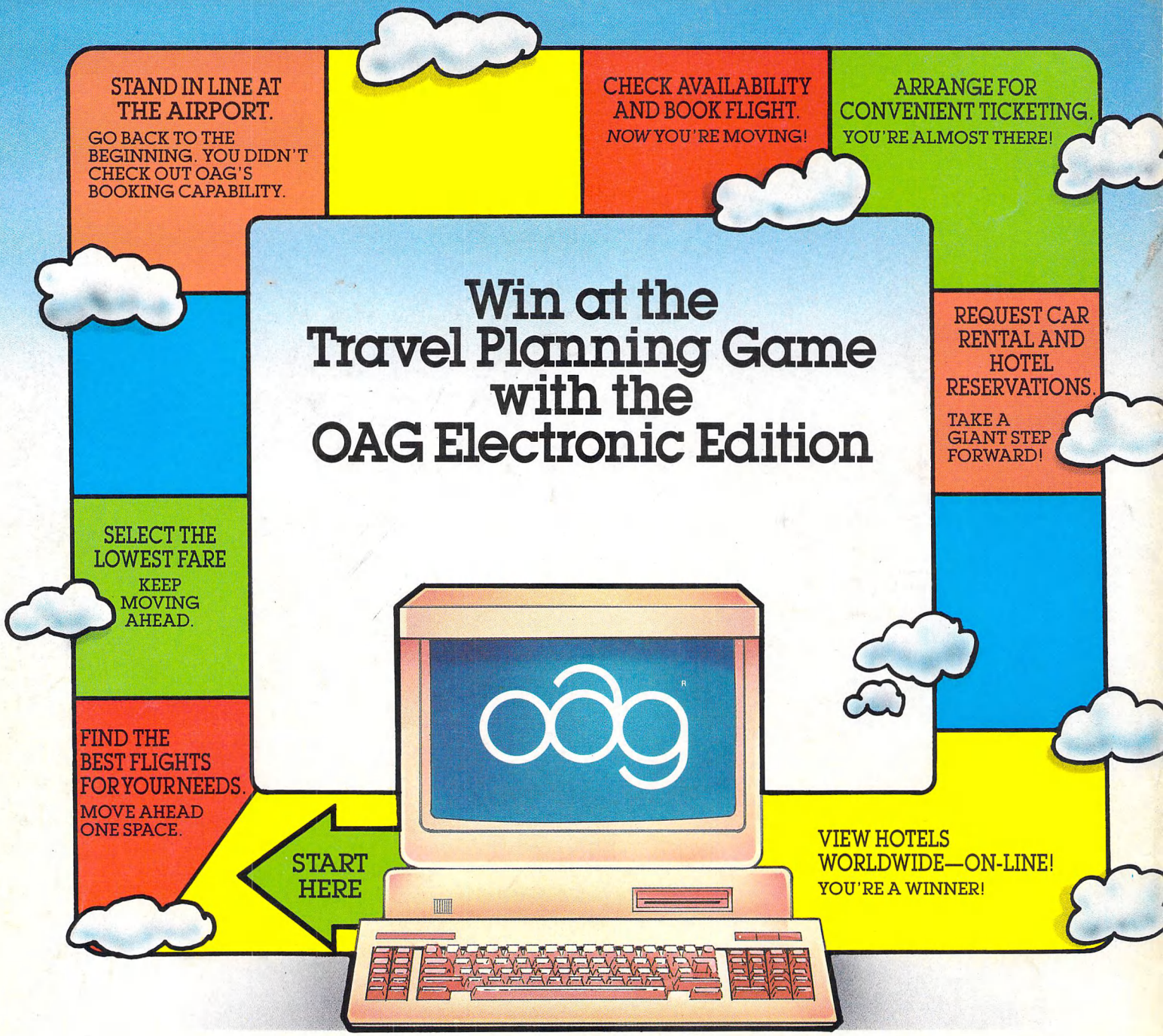
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